

THE
SURGICAL INSTRUMENTS
OF THE HINDUS

WITH

A Comparative Study of the Surgical Instruments of
the Greek, Roman, Arab and the Modern
European Surgeons

BY

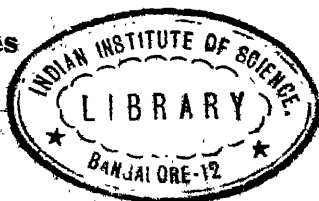
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Calcutta University.*

Griffith Prize Essay for 1909

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PREFACE

Much trouble has been taken with our illustrations, but the author is fully conscious of their many defects. I am greatly indebted to several authors mentioned in the legends to the plates as the readers will find certain of their illustrations copied in this volume. It was found necessary in a comparative study of the surgical instruments used by the different nations of the world. It has been my wish to render due credit to all persons for the illustrations by which they may severally have contributed to the advancement of our knowledge of the subject, and I have never assumed to myself drawings, which belong to others. For those illustrations, not otherwise acknowledged, the author is solely responsible.

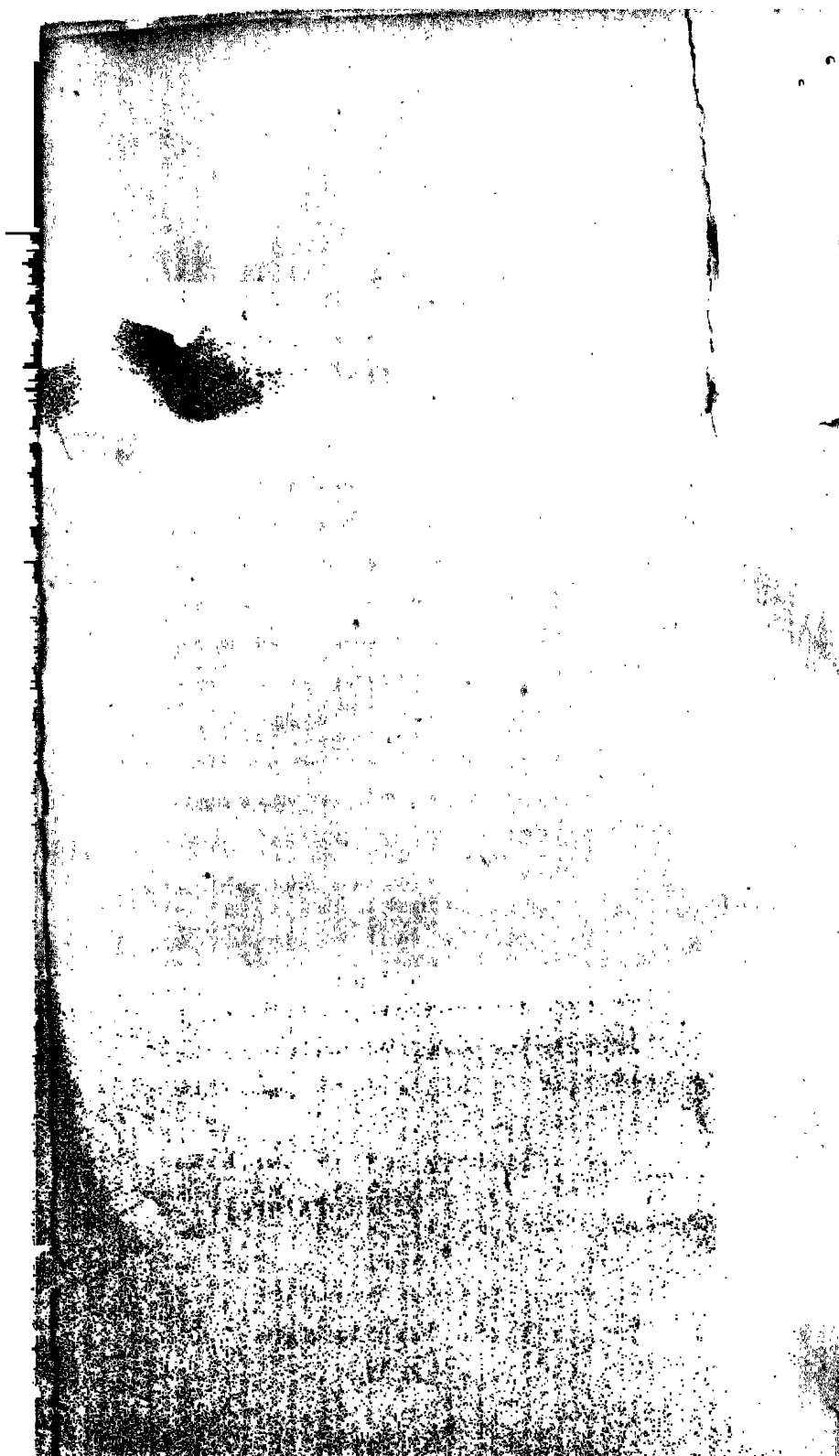
For his skill and patience in drawing and printing these figures I am glad to take this opportunity of thanking Mr. K. V. Seyne.

The author deems it a pleasant duty to express his thanks to the University of Calcutta for the liberality displayed in the matter of illustrations.

80, RUSSA ROAD NORTH,

Calcutta, February, 1914.

} G. N. MUKHOPADHYAYA.



ABBREVIATIONS

- Adams : The Genuine Works of Hippocrates. Translated by Francis Adams, LL.D. in two volumes. (Sydenham Society).
- A. H. : Catalogue of Surgical Instruments and Appliances. Allen and Hanburys Ltd. 1903.
- A. S. : Catalogue of Surgical Instruments and Appliances. Arnold and Sons. 1895.
- Anderson : See Wellcome.
- B. B. : Surgical Instruments and Appliances. Burgoyne, Burbidges & Co.
- C. C. G. : Collection de Chirurgiens Grecs. Bibliothèque Nationale. Paris.
- Erichsen : The Science and Art of Surgery. By Sir John Eric Erichsen Bt., F.R.S., LL.D. Tenth Edition. 1895.
- Esmarch : The Surgeon's Handbook of the Treatment of Wounded in War. By Dr. Friedrich Esmarch.
- Heath : Minor Surgery and Bandaging. By C. Heath, F.R.C.S. Second Edition.
- I. M. G. : Indian Medical Gazette, 1904.
- K. S. : Catalogue of Surgical Instruments. Kny-Scheerer & Co.
- Milne : Surgical Instruments in Greek and Roman Times. By T. S. Milne, M.A., M.D., 1907.
- Porter : The Surgeon's Pocket-Book. The Best Treatment of Wounded in War. Surgeon-Major T. H. Porter. 1891.
- Princep : Princep's (Thomas') Indian Antiquities.

- Swain : Surgical Emergencies. By W. P. Swain,
F.R.C.S. Third Edition. 1880.
- Thakore Saheb : History of Aryan Medical Science. By H. H.
Sir Bhagvat Singh Jee., K.C.I.E., M.D.,
D.C.L., LL.D., F.R.C.P.E. Thakore Saheb
of Gondal. 1896.
- Waggett : Diseases of the Nose. By E. B. Waggett,
M.A., M.B., B.C. 1907.
- Wellcome : Third Report of the Wellcome Research
Laboratories at the Gordon Memorial College,
Khartoum.
- White : The Veterinary Art. By James White. 1851.
-

CORRECTIONS

Page	37	Plate	XIX	Fig.	5	Read	Samipatra	for	Amipatra.
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"	103	"	LII	"	209	"	4	"	209
"	108	"	LIV	"	5	"	6	"	5
"	108	"	LIV	"	6	"	5	"	6
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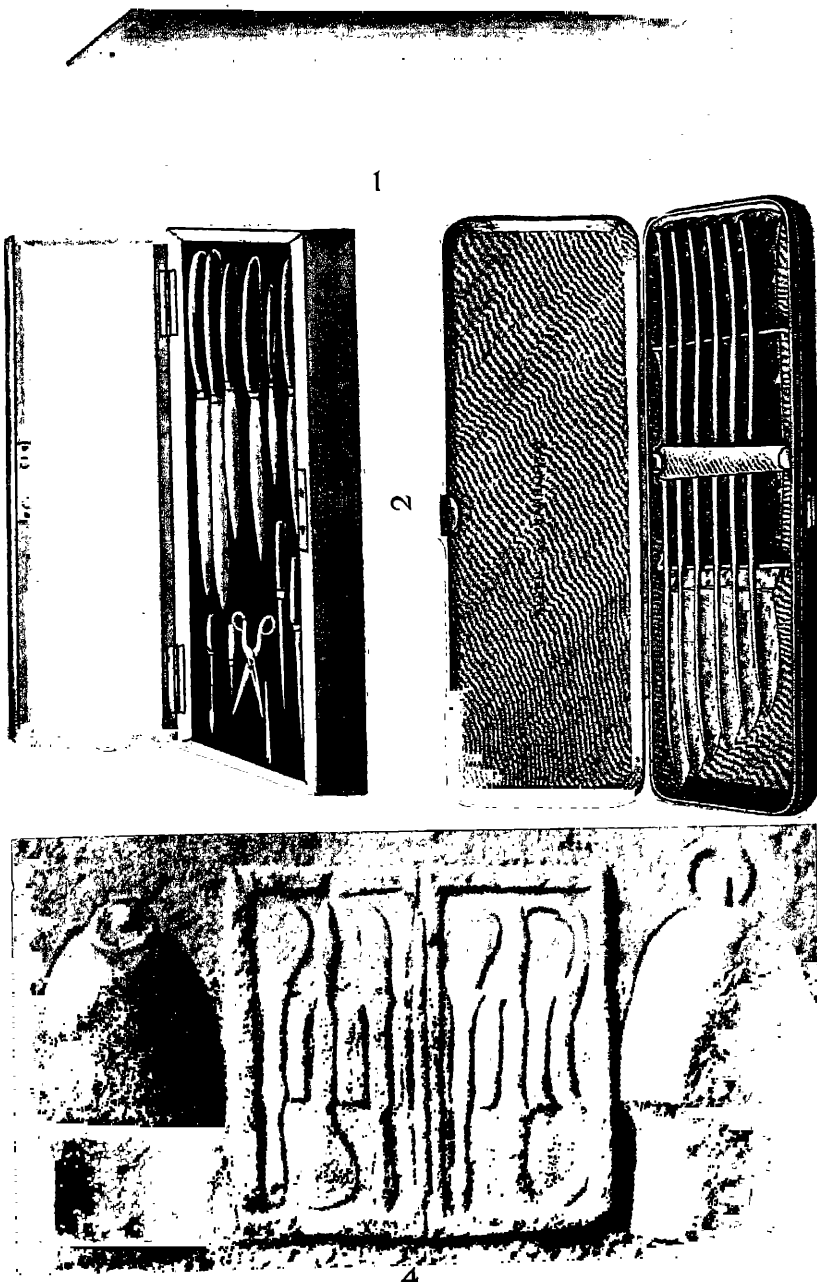
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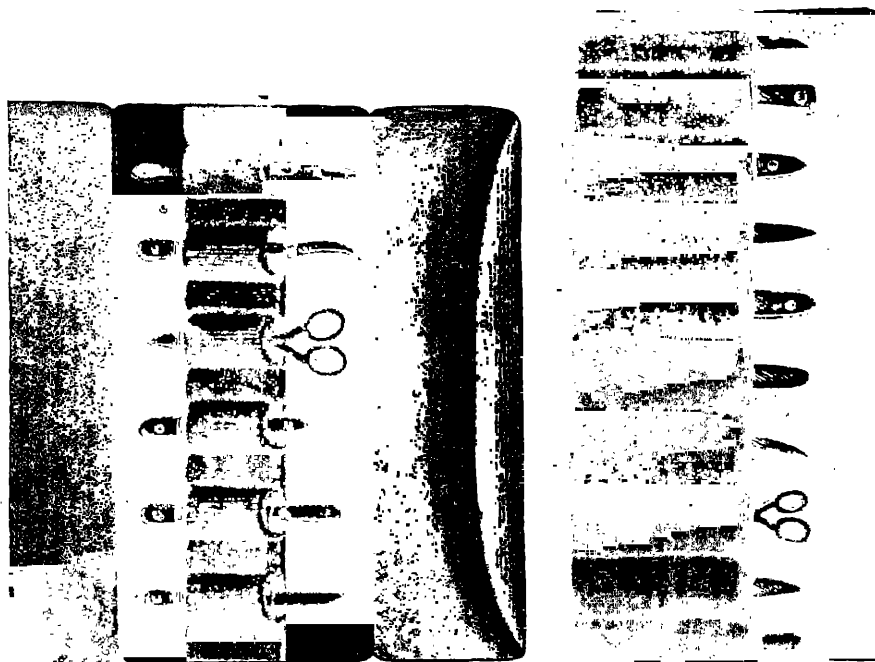
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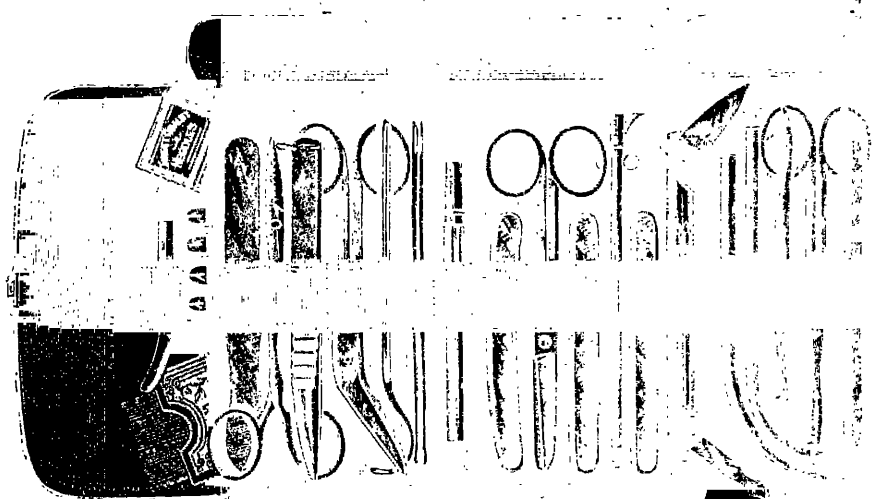
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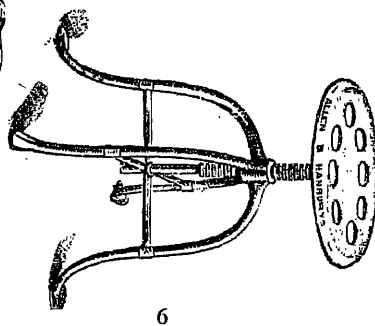
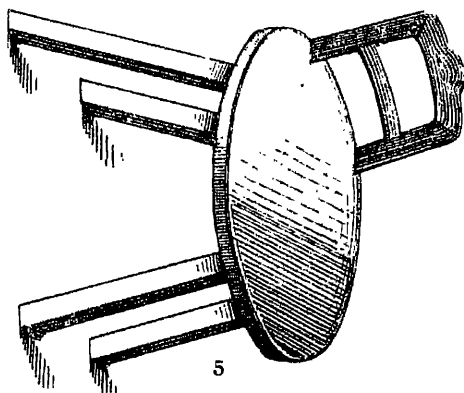
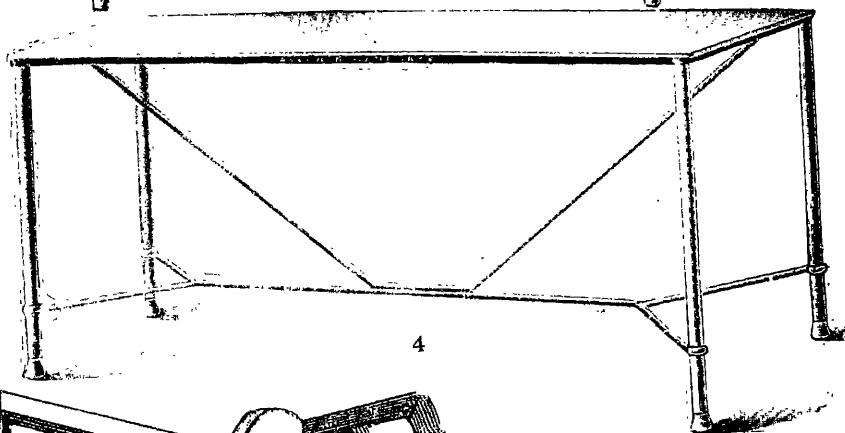
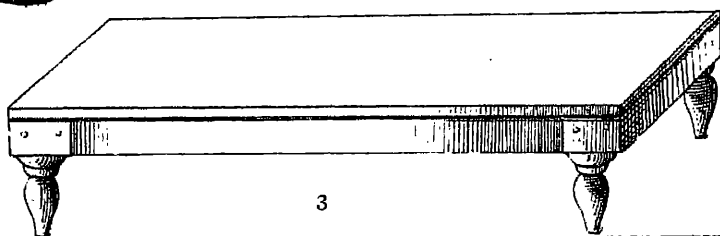
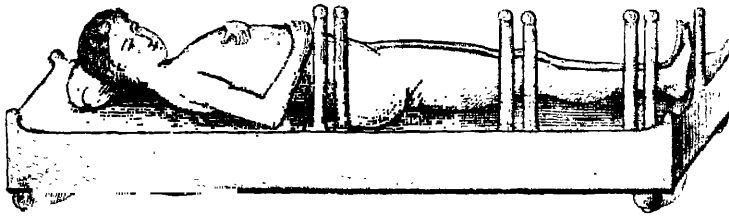


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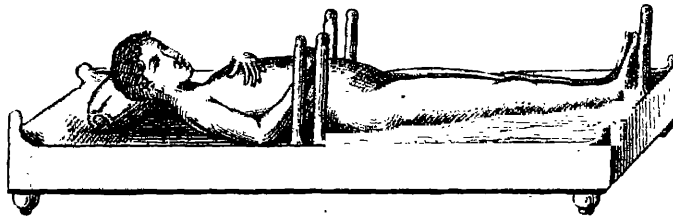
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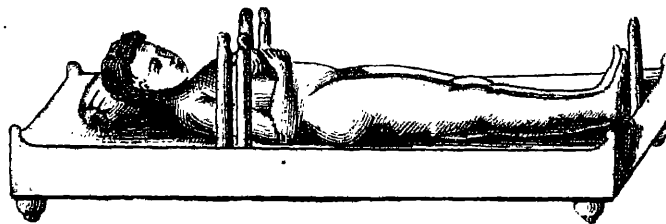
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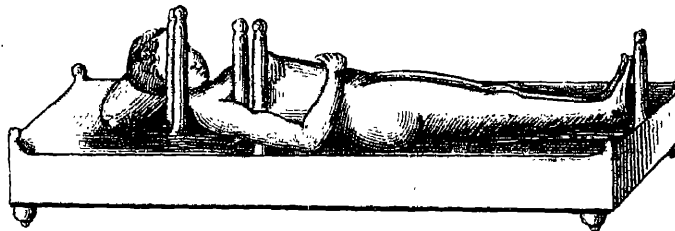
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C. Groove in which the end of the lever A takes its point of support.

D. The luxated member.

EE. Extension and counter-extension.

Adams. Vol. II. Pl. V. Fig. 1.

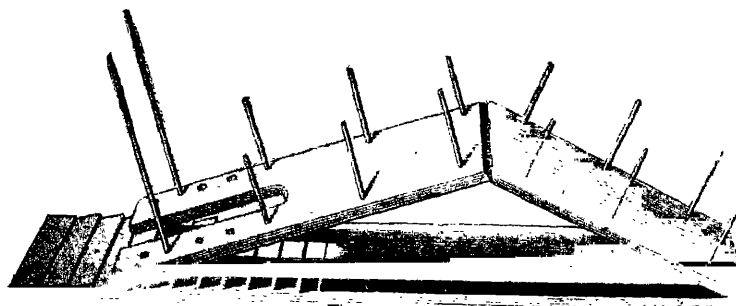
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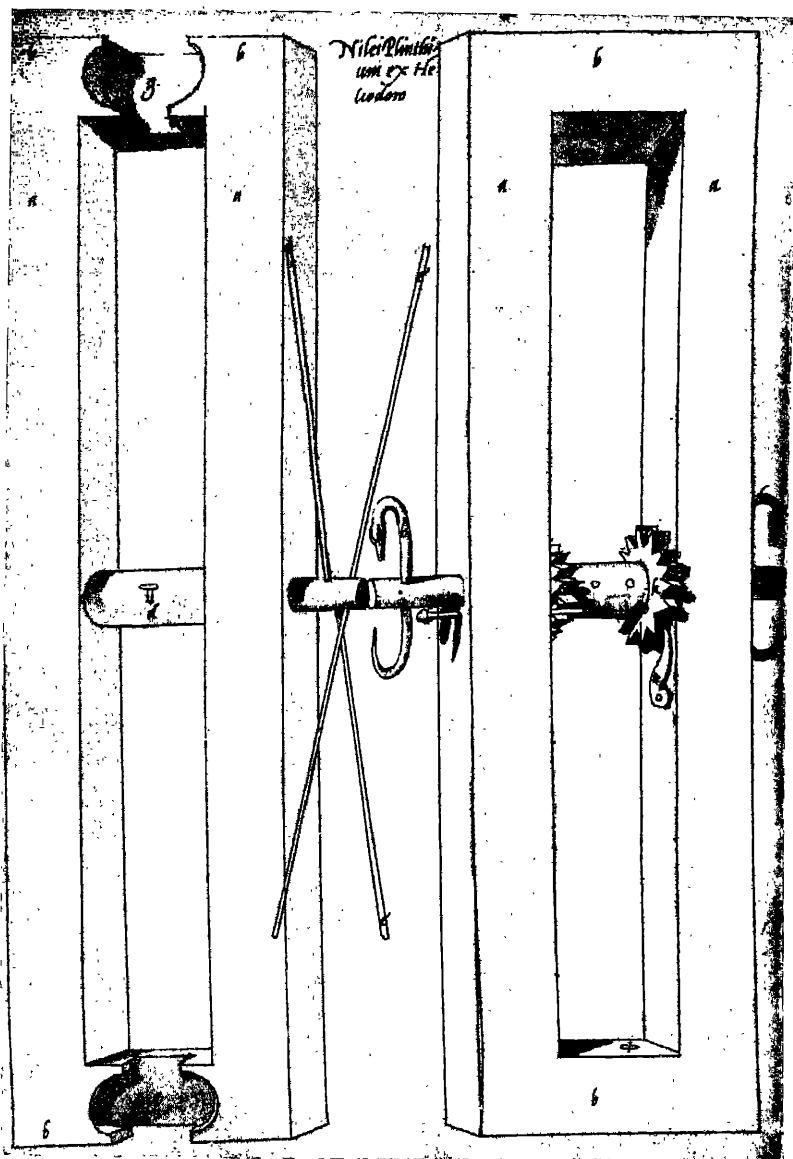
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Plate X.



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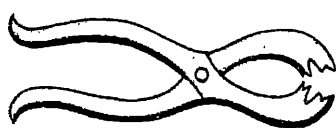
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THE SVASTIKA YANTRA OR CRUCIFORM INSTRUMENTS.

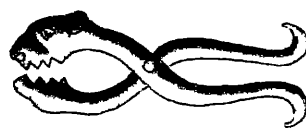
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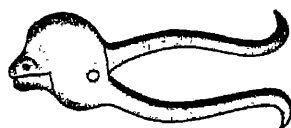
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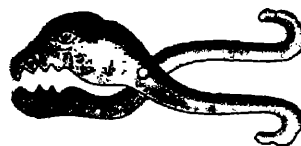
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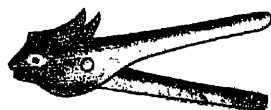
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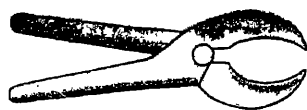
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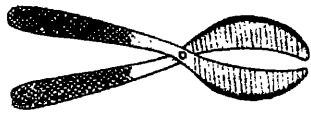
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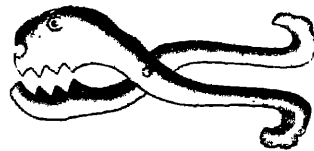
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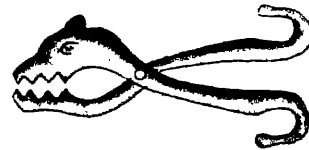
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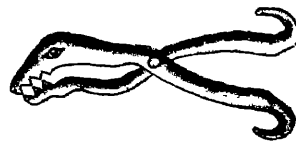
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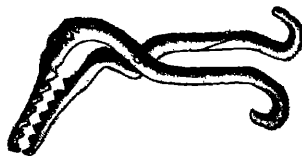
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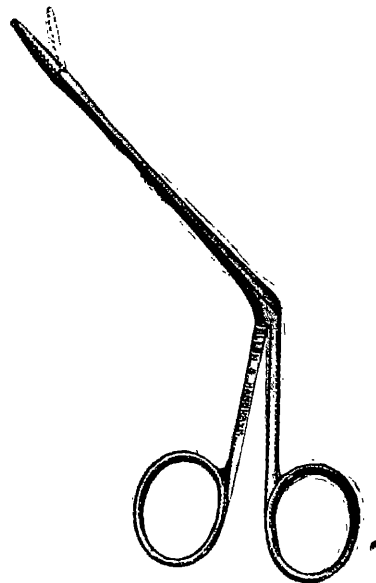
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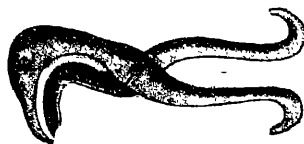
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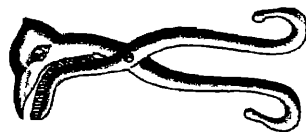
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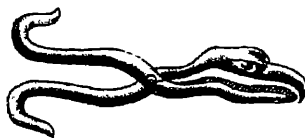
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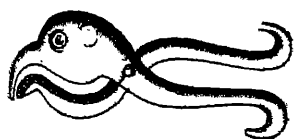
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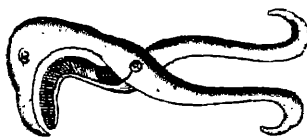
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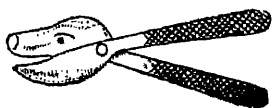
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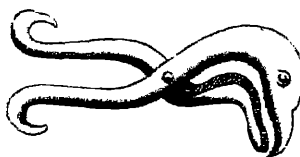
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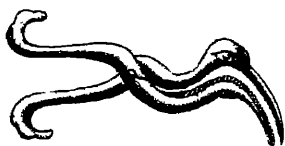
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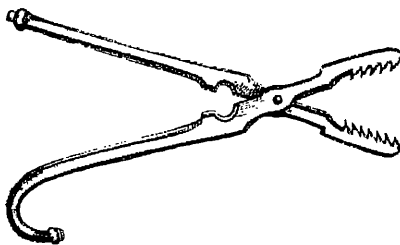
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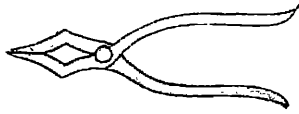
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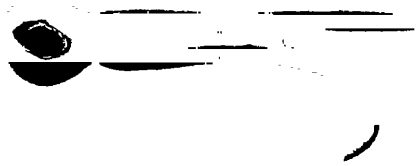
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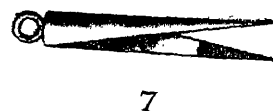
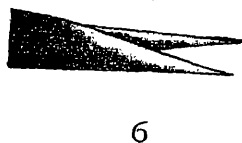
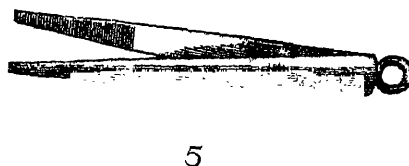
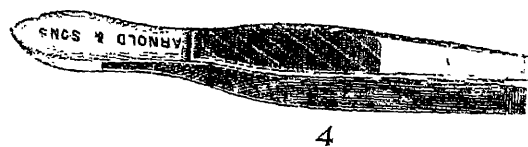
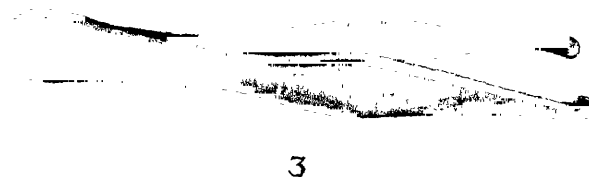
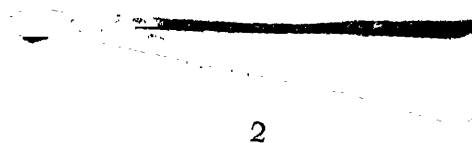
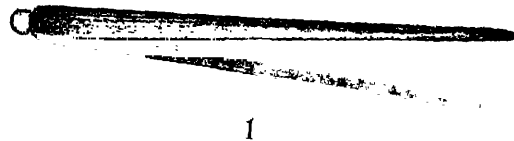
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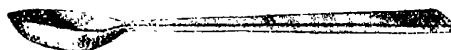
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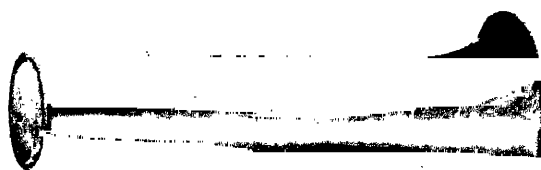
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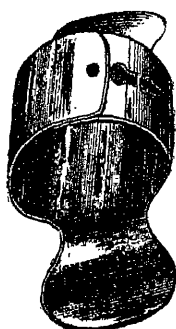
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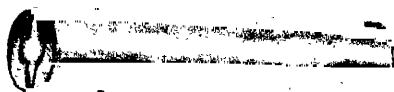
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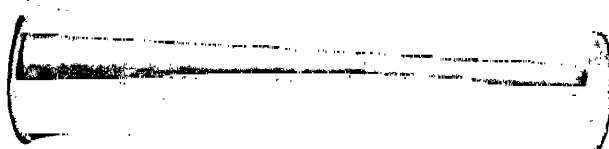
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THE SURGICAL INSTRUMENTS OF THE HINDUS.

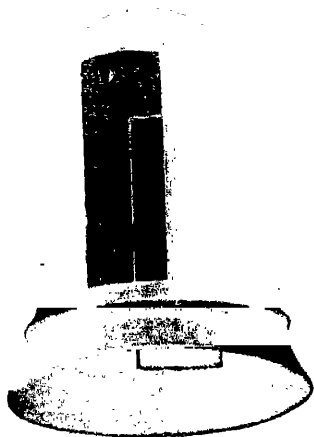
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THE NĀḌĪ YANTRA OR TUBULAR INSTRUMENTS.

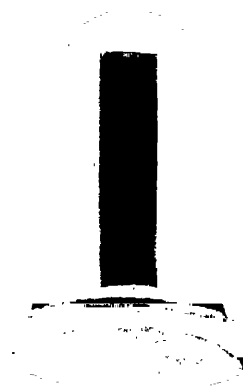
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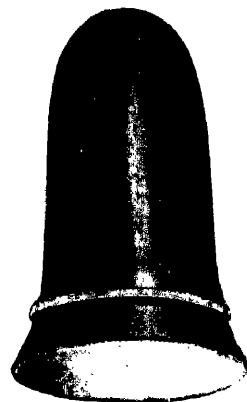
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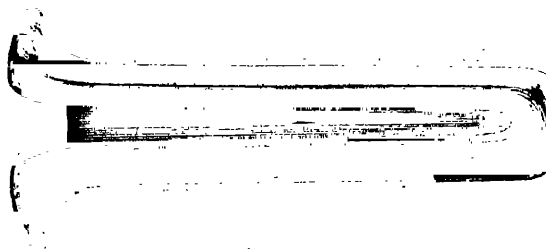
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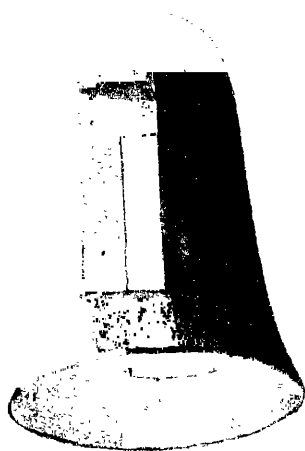
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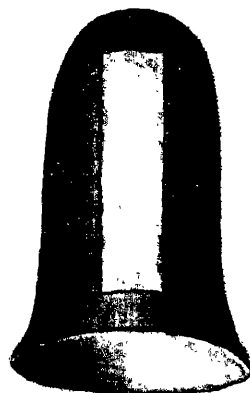


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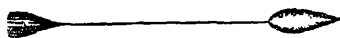
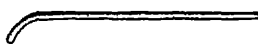
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NĀDĪ YANTRA OR TUBULAR INSTRUMENTS.

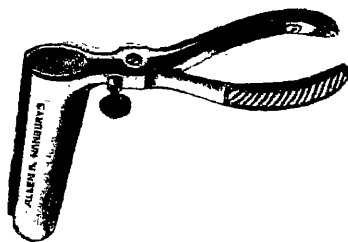
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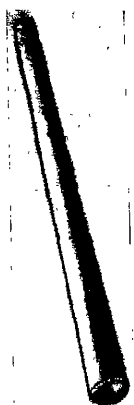
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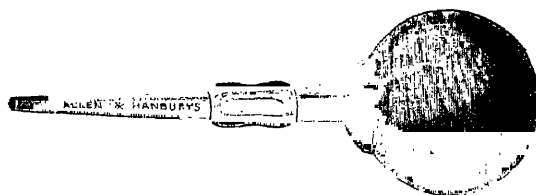
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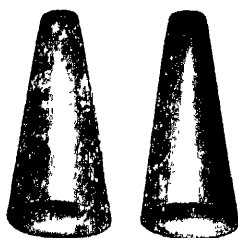
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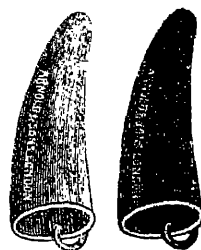
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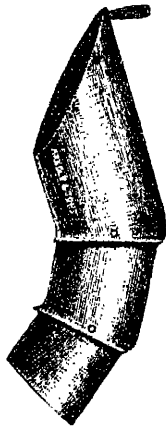
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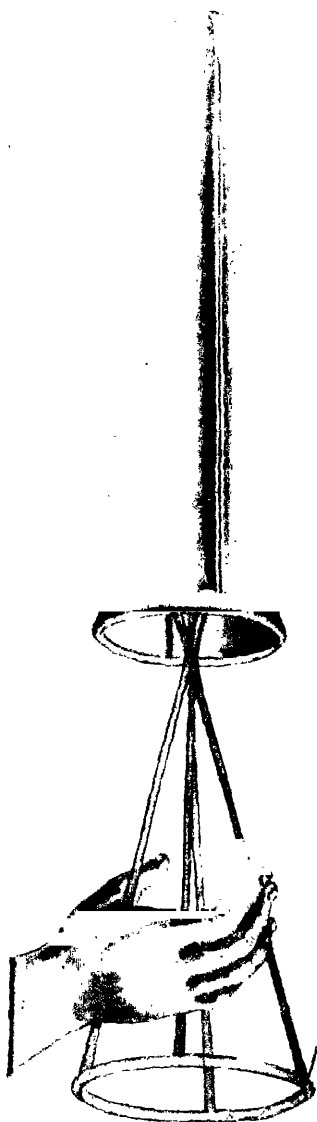
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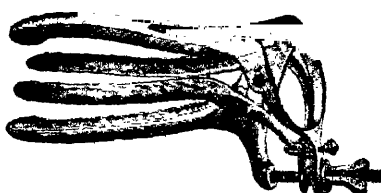
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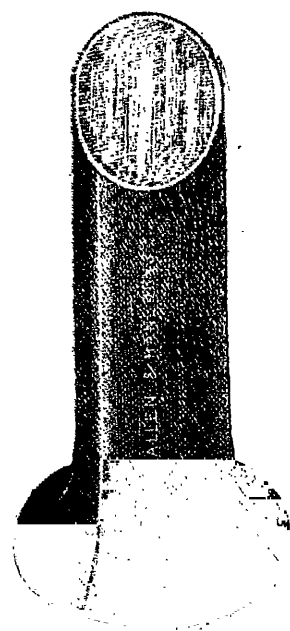
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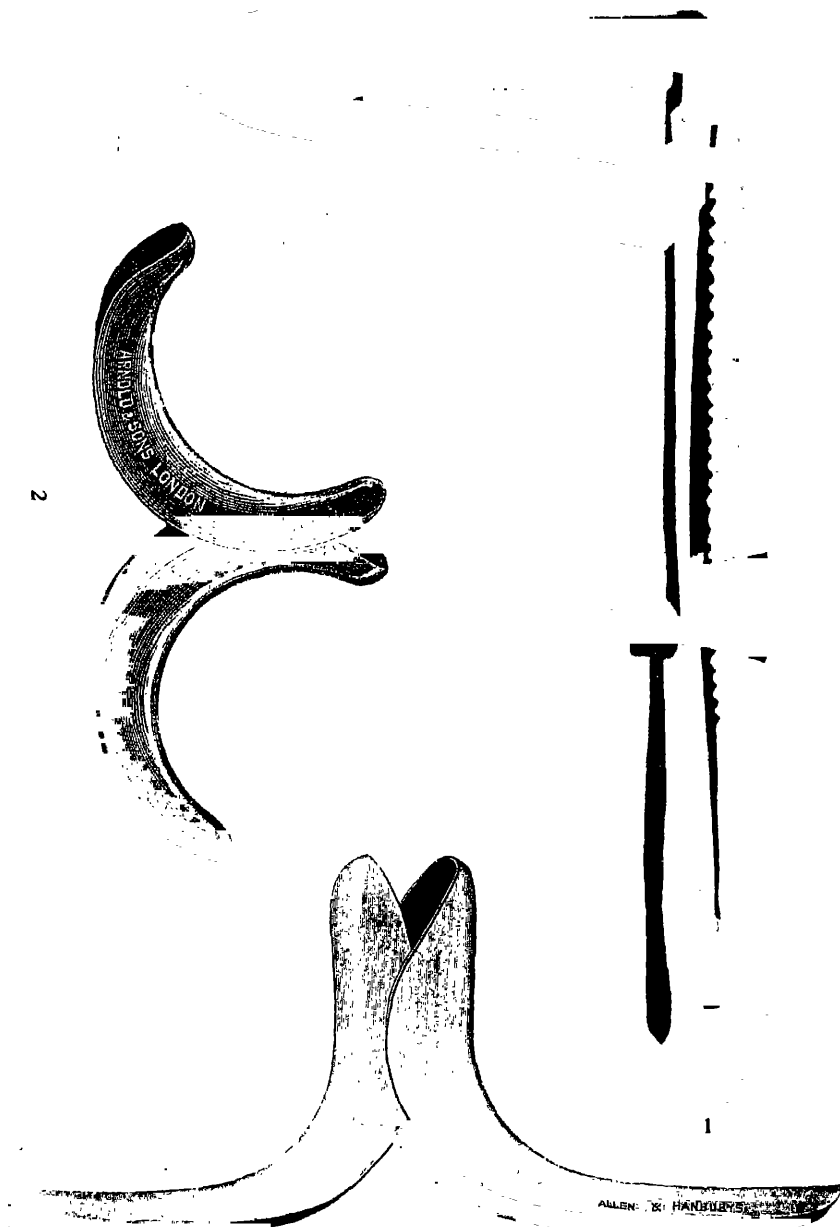
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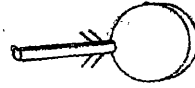
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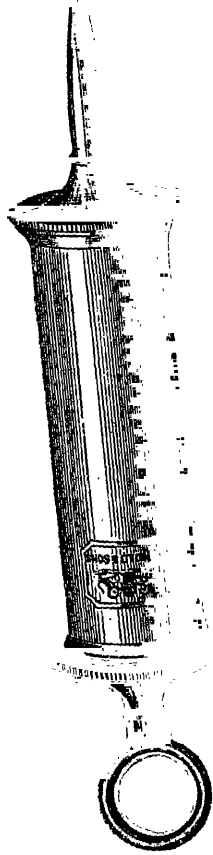
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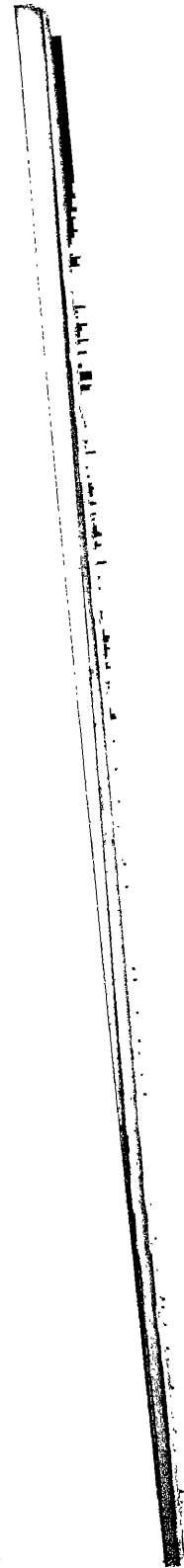
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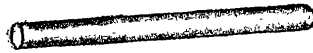
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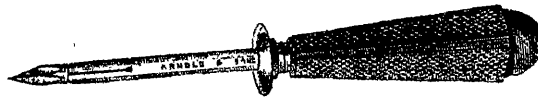
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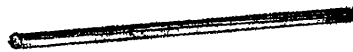
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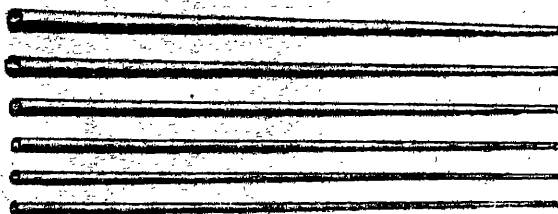
THE NĀḌĪ YANTRA OF TUBULAR INSTRUMENTS.

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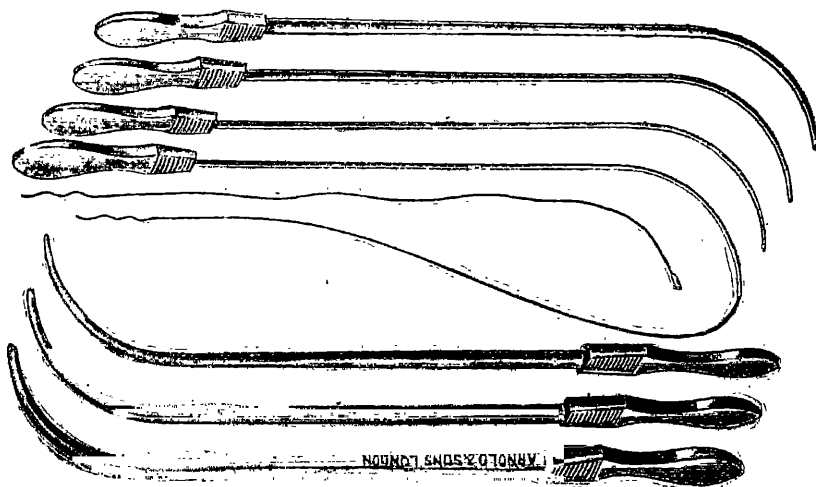
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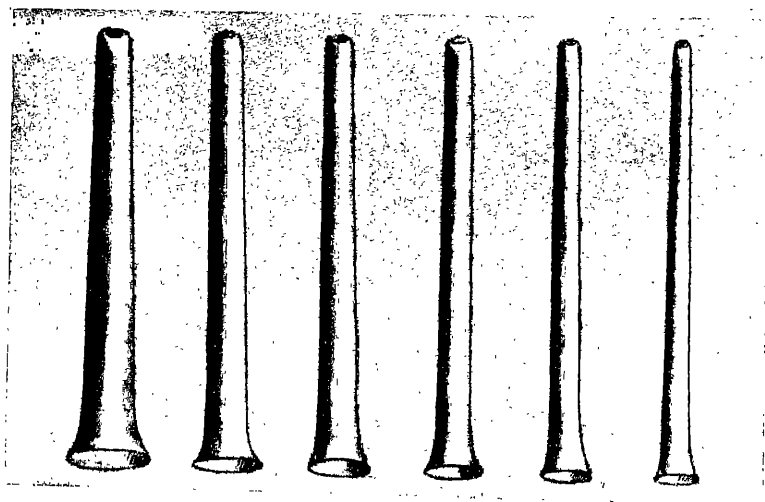
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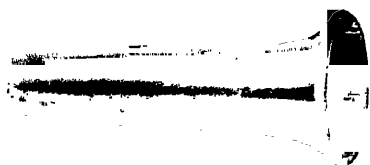
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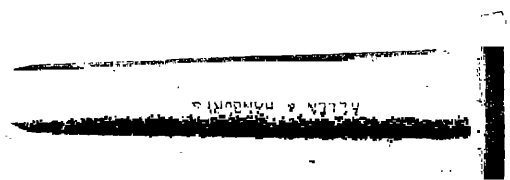
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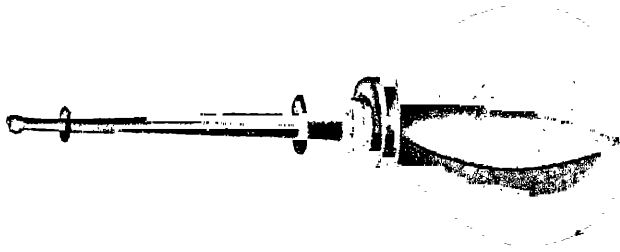
THE NĀḌI YANTRA OR TUBULAR INSTRUMENTS.

VASTI YANTRA OR RECTAL CLYSTER.

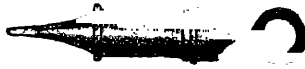
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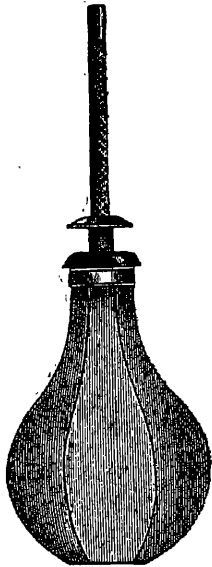
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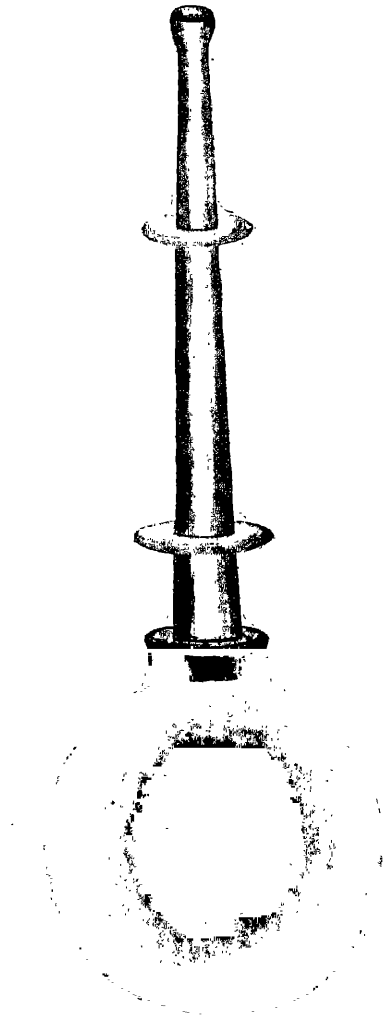
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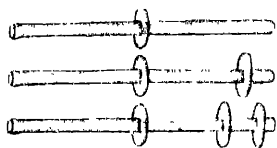
THE NĀḌĪ YANTRA OR TUBULAR INSTRUMENTS.
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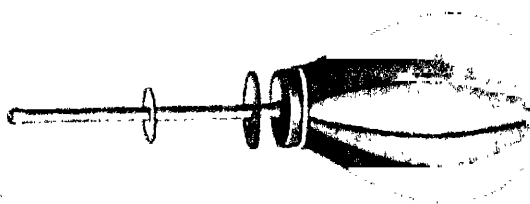
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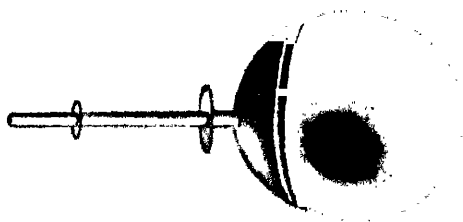
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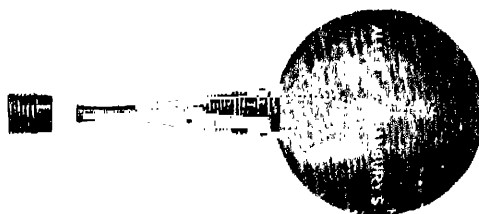
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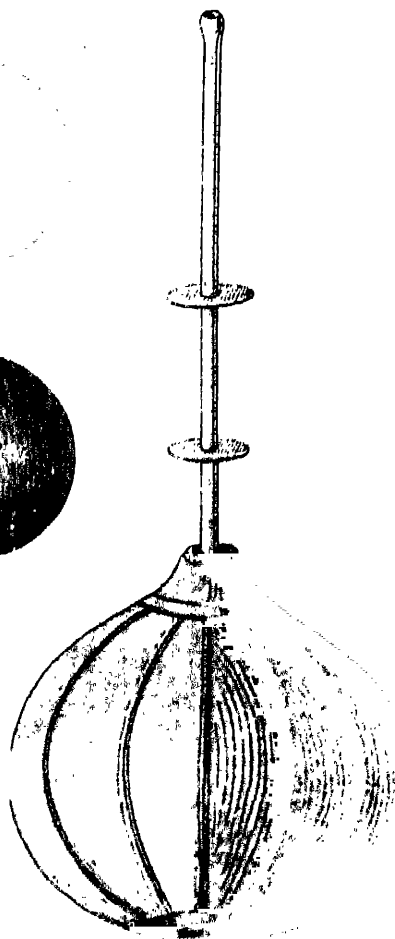
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THE NĀDĪ YANTRA OR TUBULAR INSTRUMENTS.

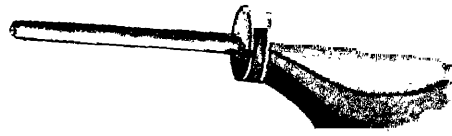
UTTARAVASTI.

TUBULAR INSTRUMENTS FOR VAGINA AND UTERUS.

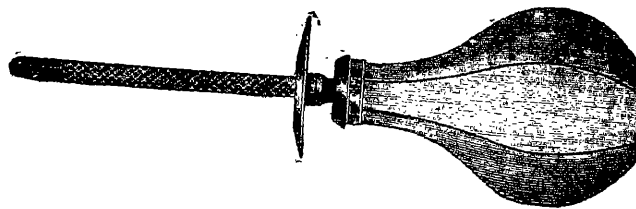
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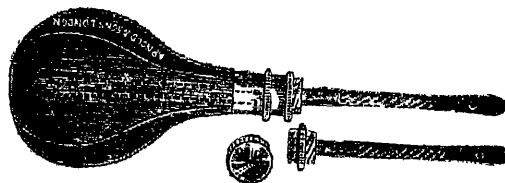
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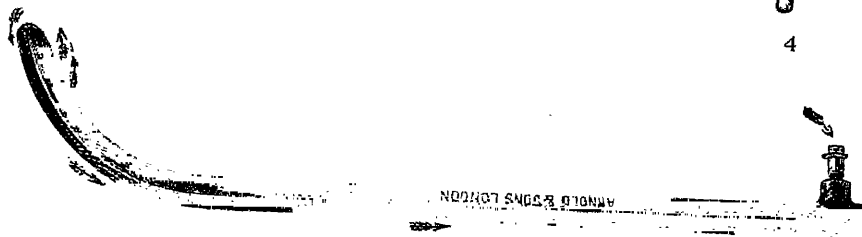
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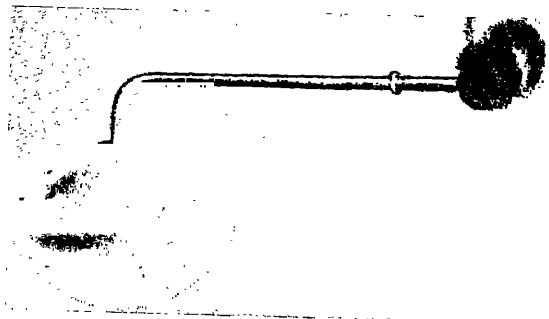
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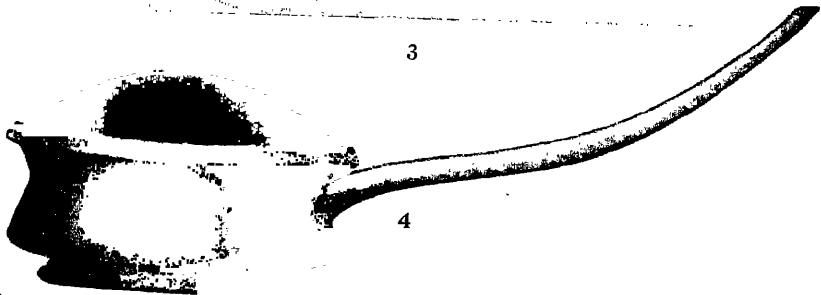
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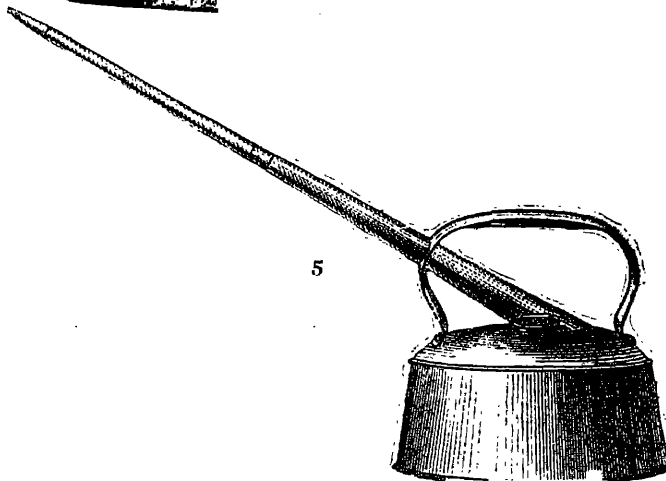
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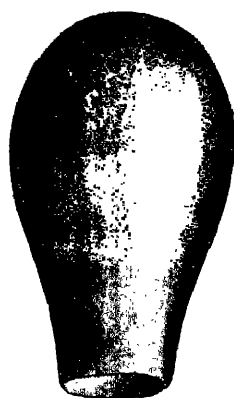
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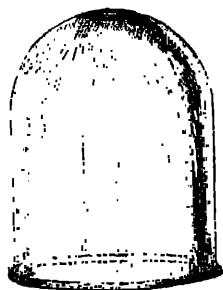
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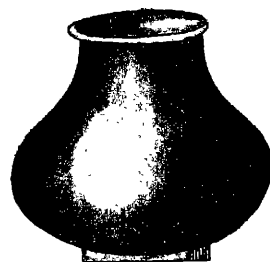
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PLATE XXXIV.

THE NĀḌĪ YANTRA OR TUBULAR INSTRUMENTS:

TABULAR INSTRUMENTS FOR CUPPING.

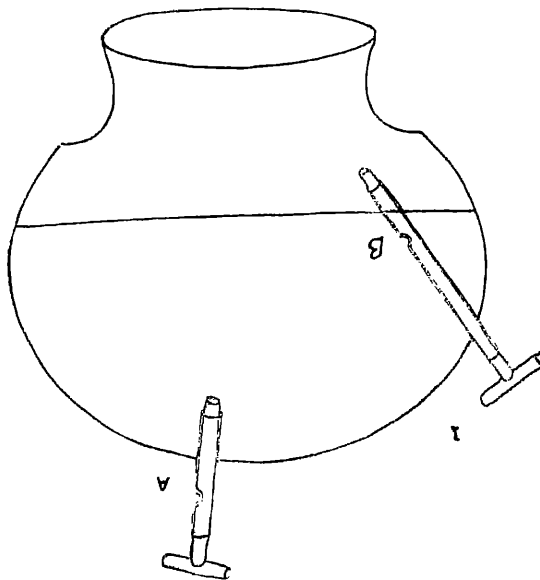
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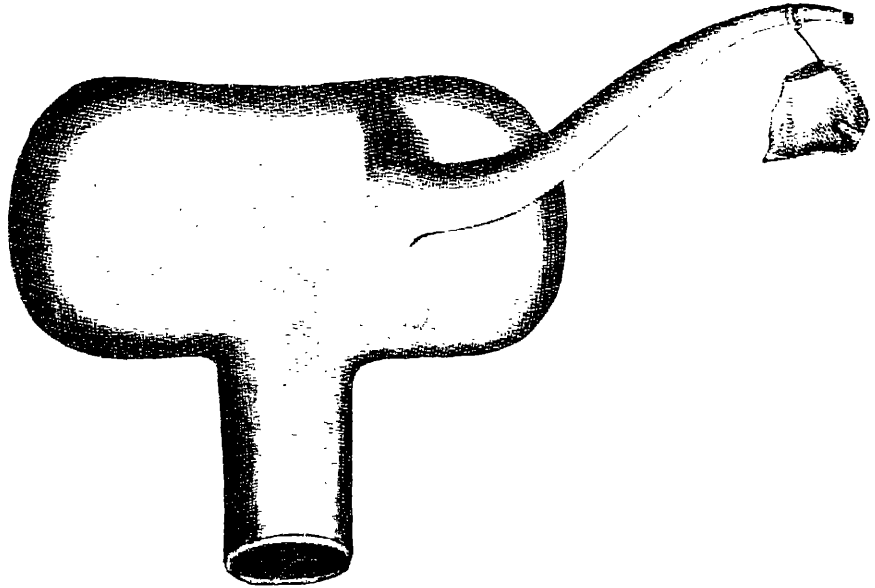
THE NĀḌĪ YANTRA OR TUBULAR INSTRUMENTS.

TUBULAR INSTRUMENTS FOR CUPPING,

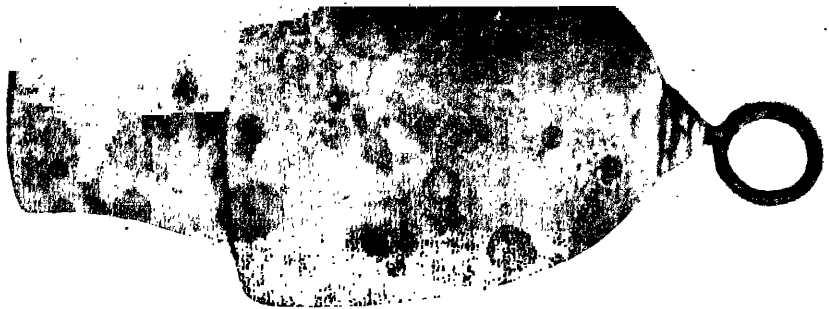
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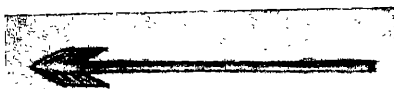
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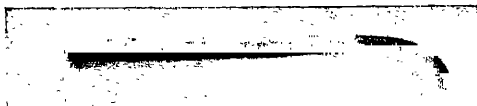
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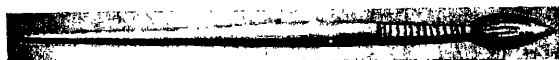
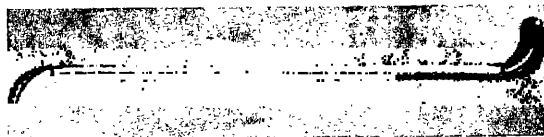
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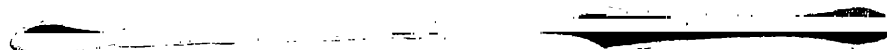
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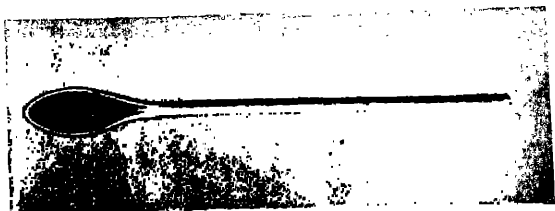
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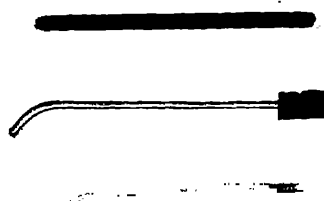
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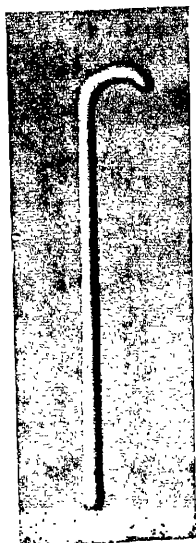
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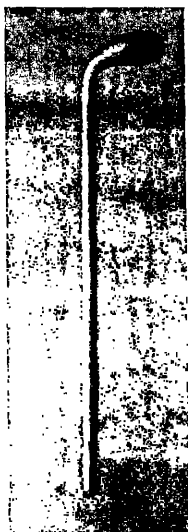
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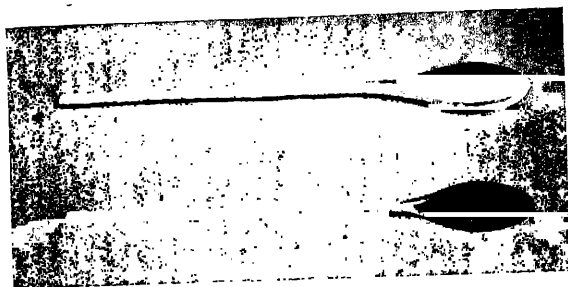
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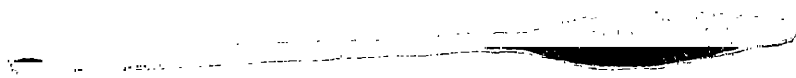
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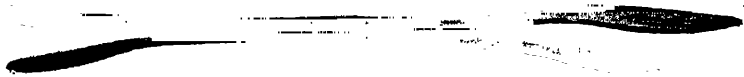
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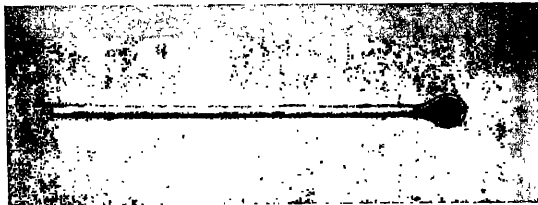
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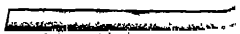
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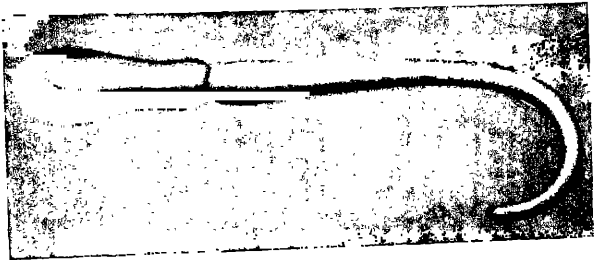
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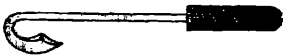


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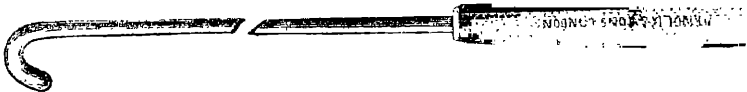
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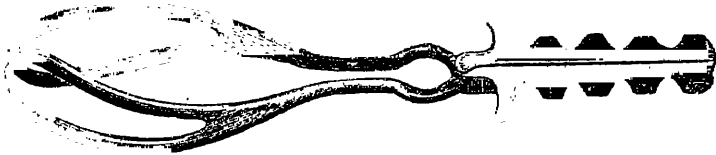
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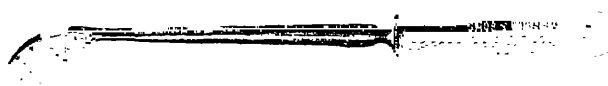
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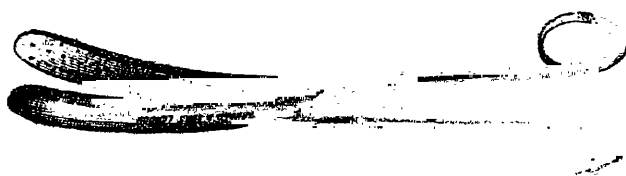
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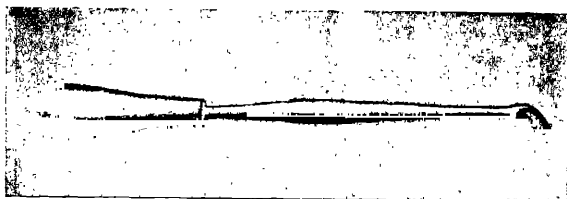
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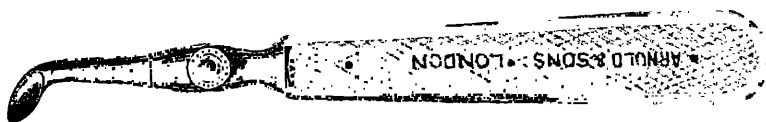
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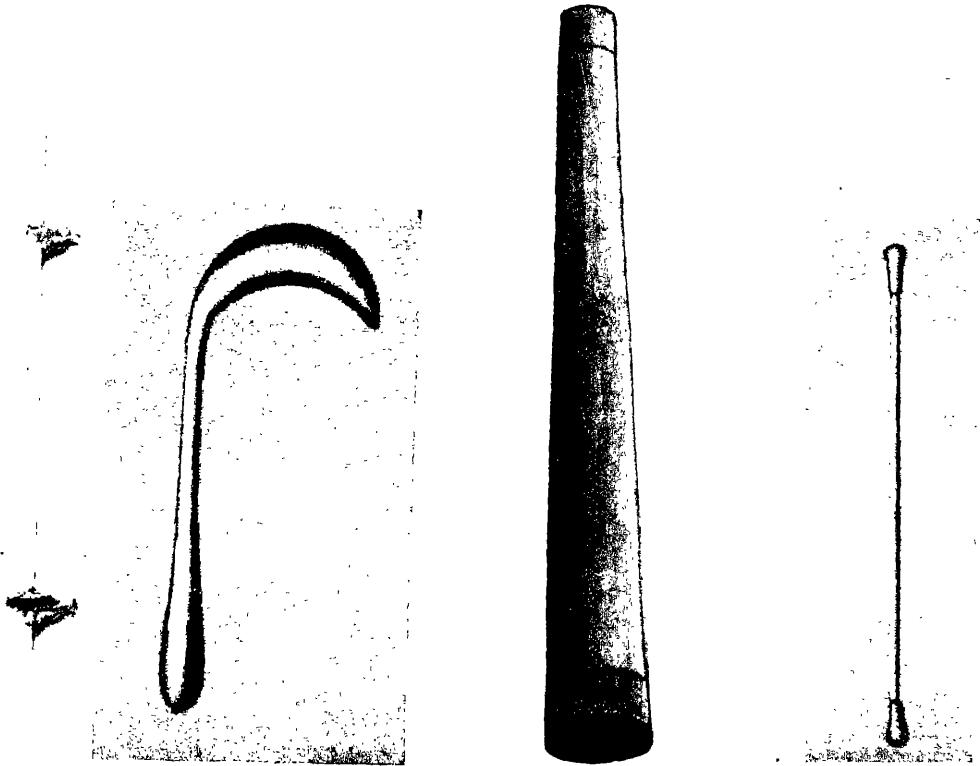
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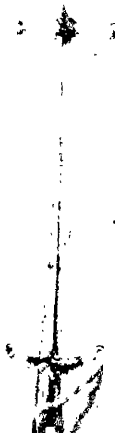


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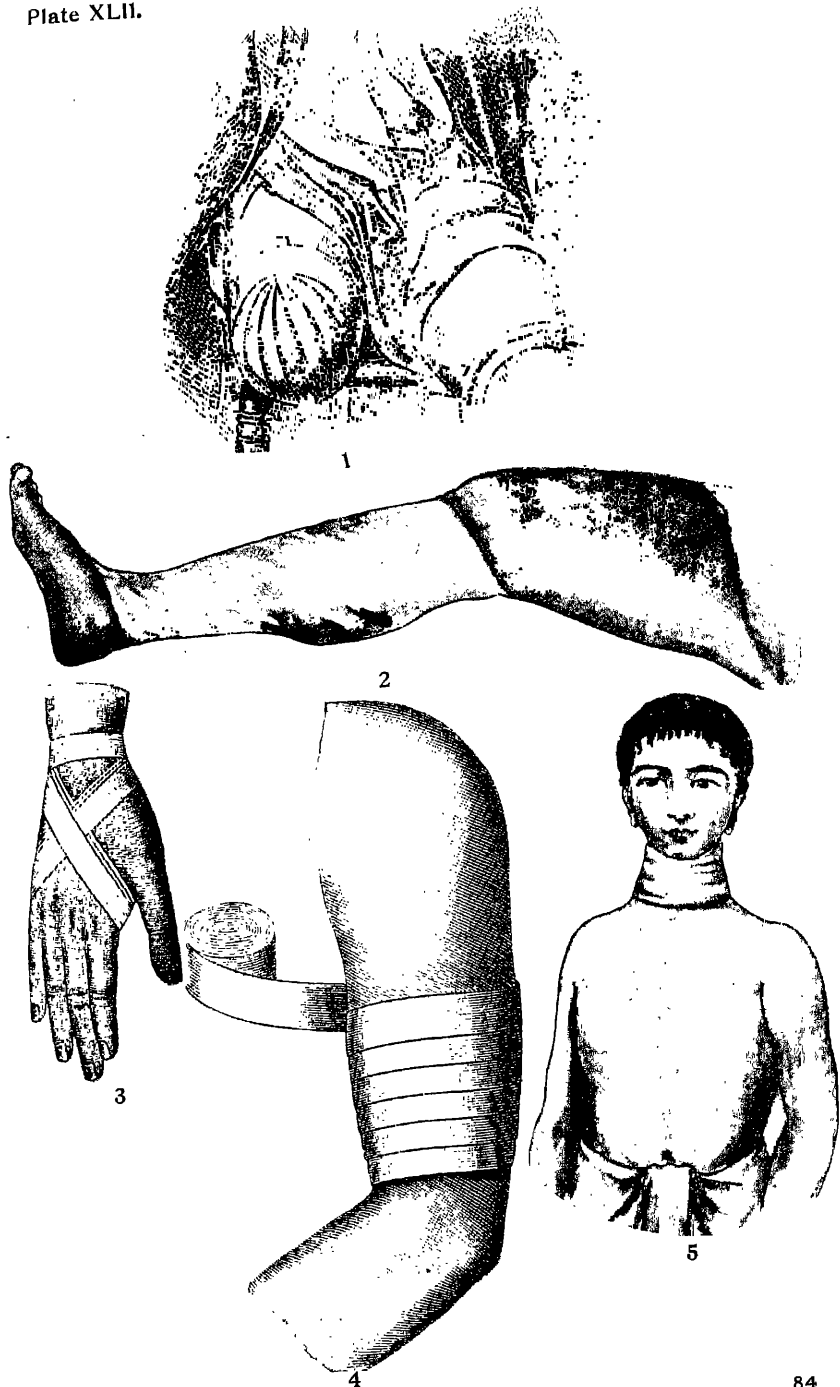
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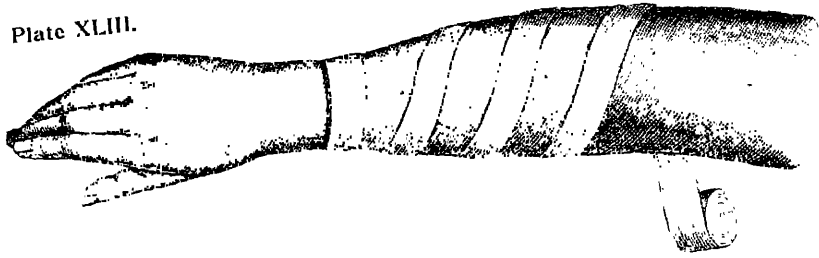
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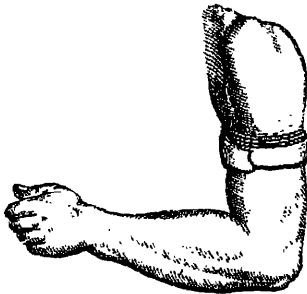
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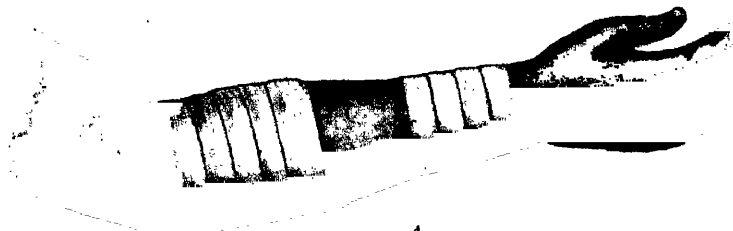
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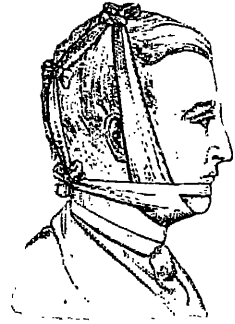
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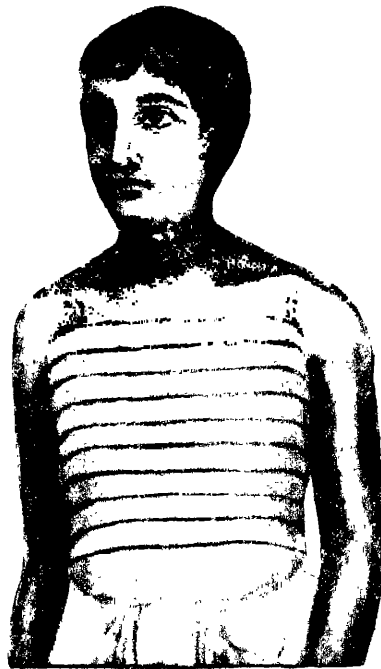
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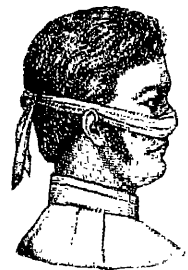
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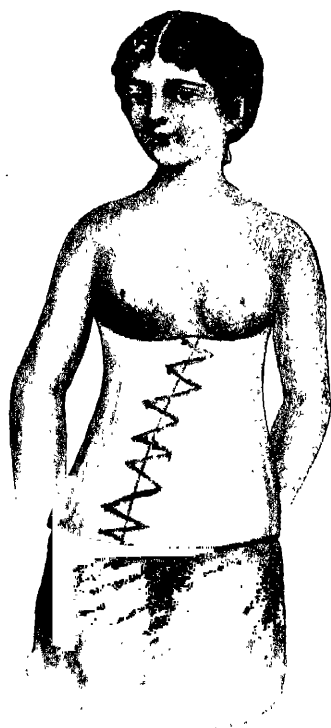
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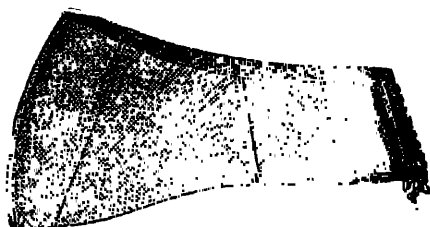
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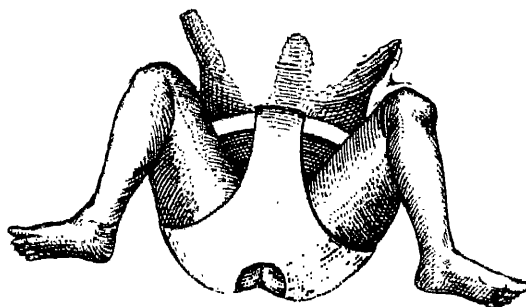
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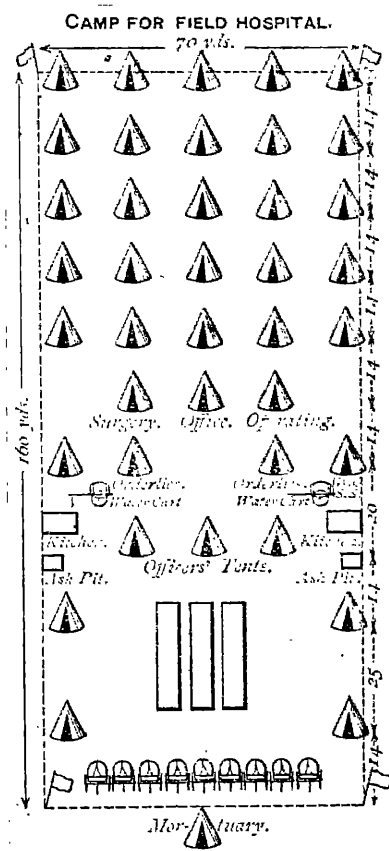
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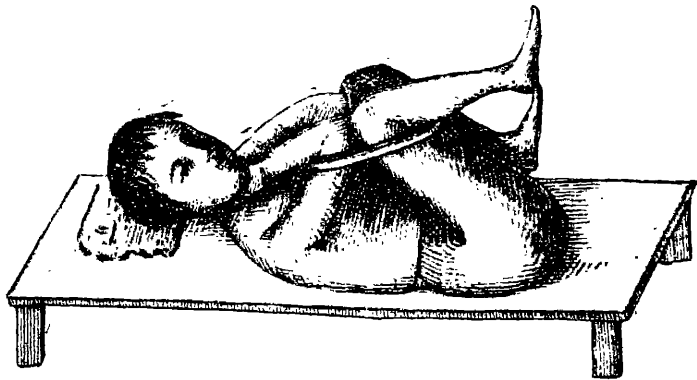
YANTRA-ŚĀṬAKA OR BINDING APPARATUS.

FIGURE.

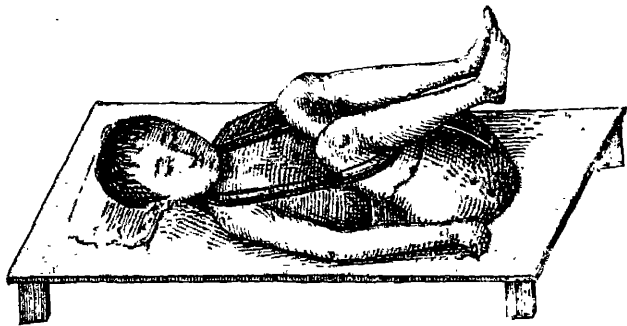
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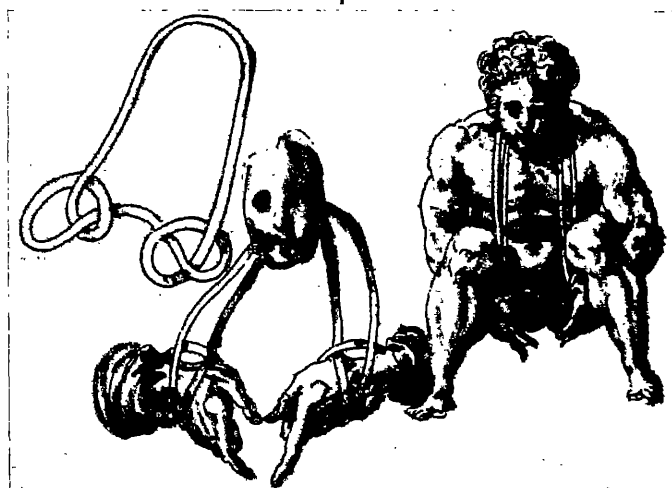
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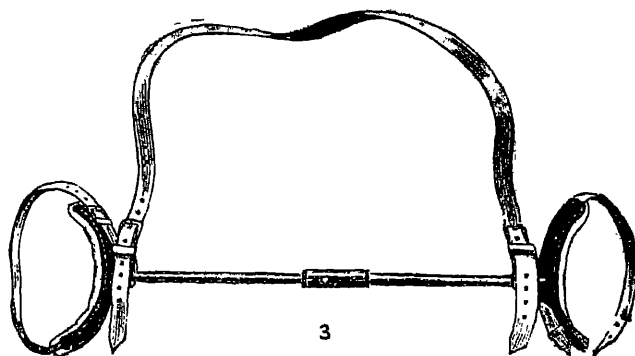
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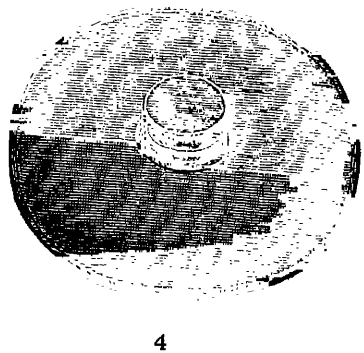
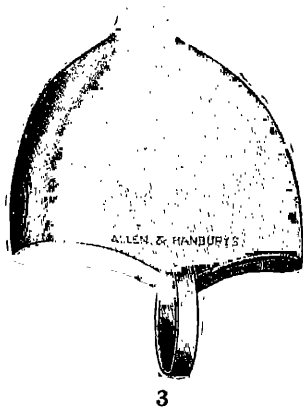
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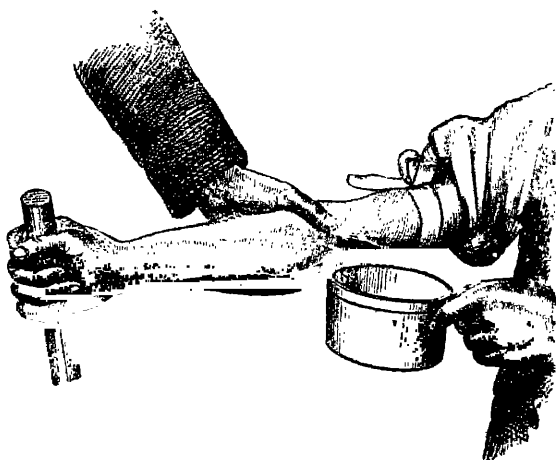
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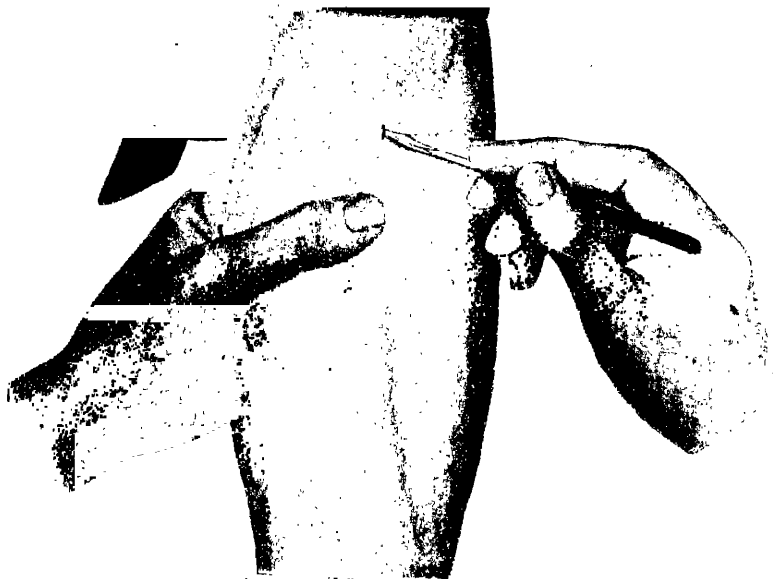
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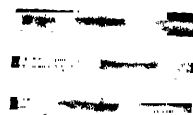
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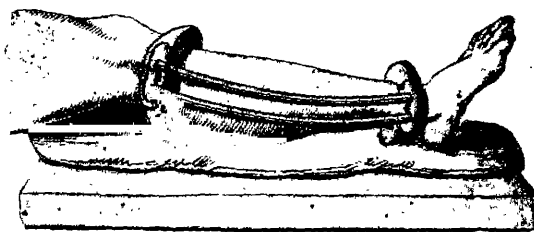
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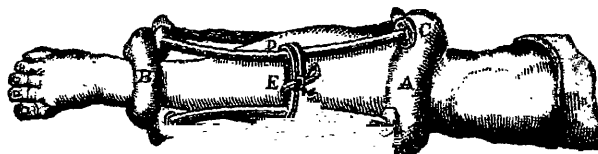
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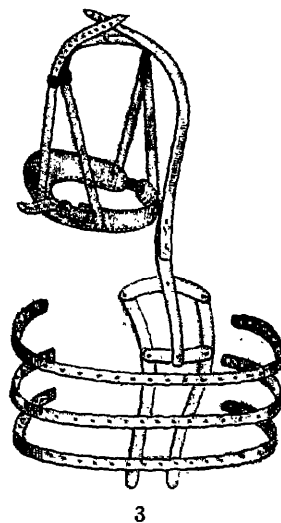
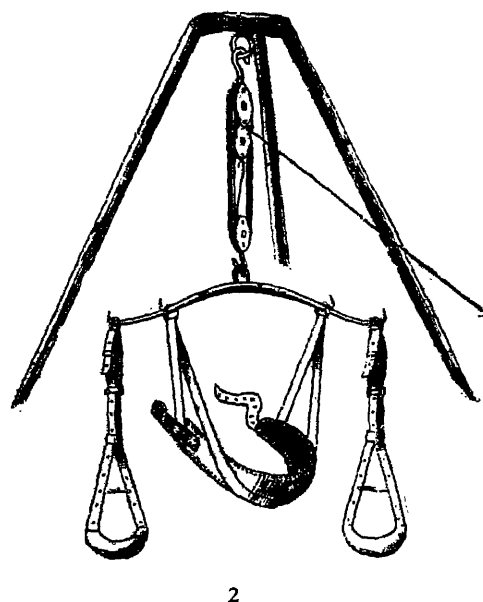
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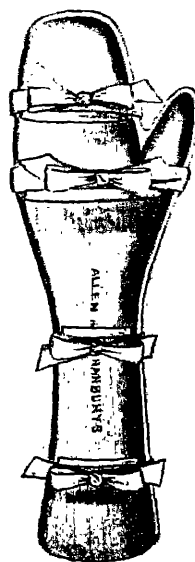
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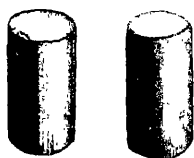
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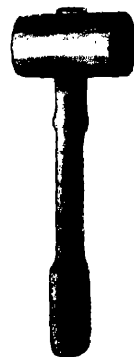
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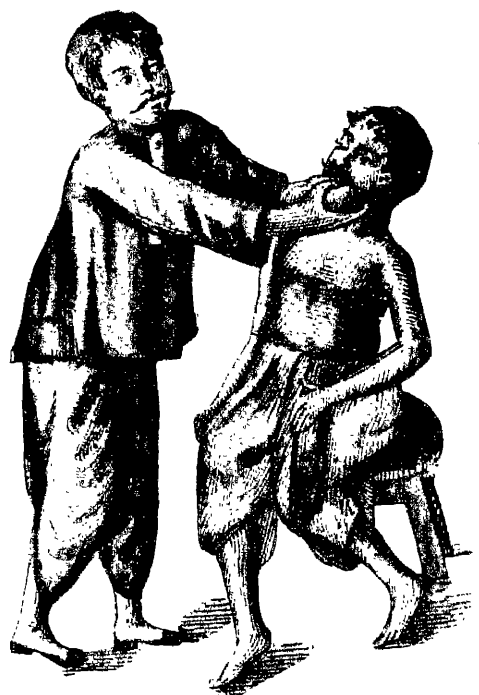
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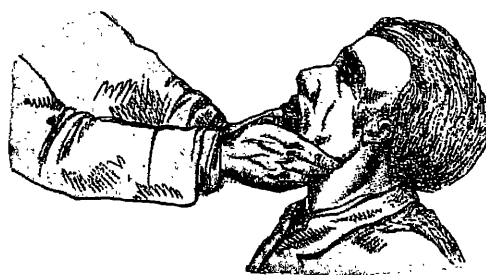
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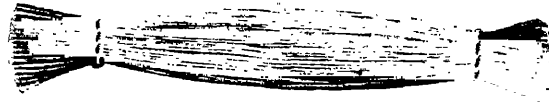
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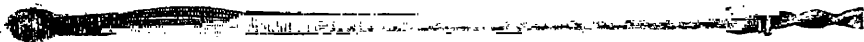
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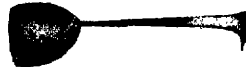
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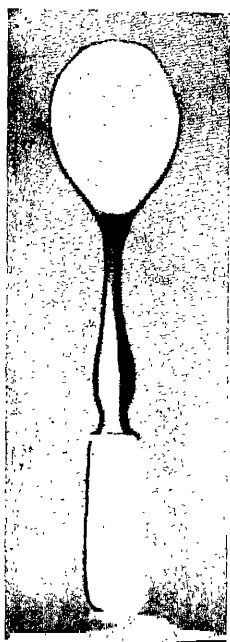
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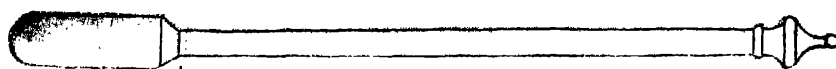
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PLATE LIX.

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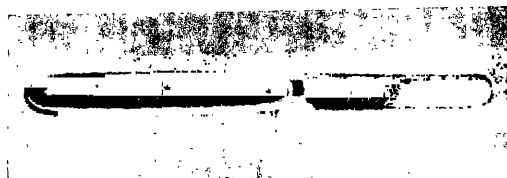
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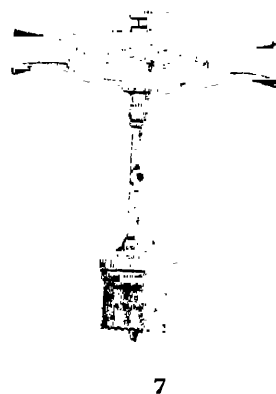
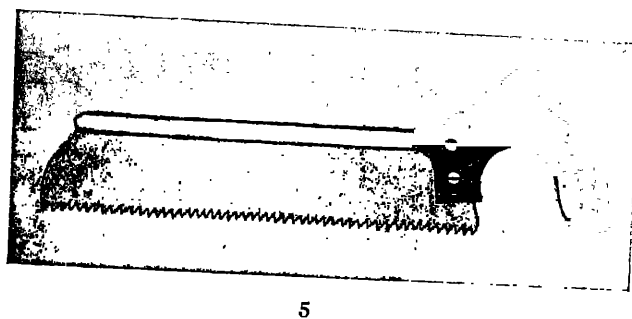
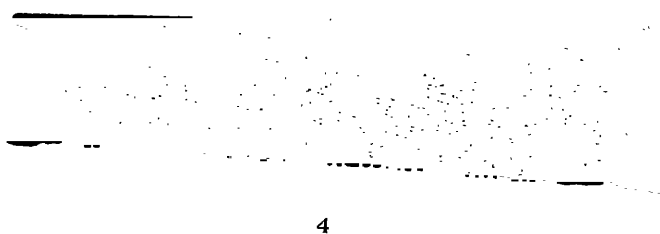
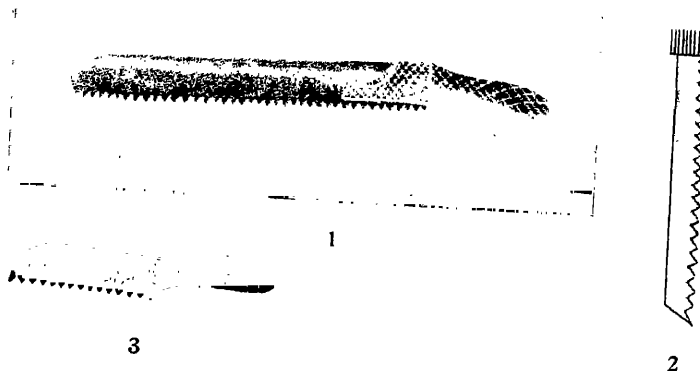
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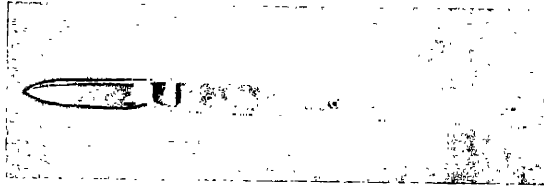
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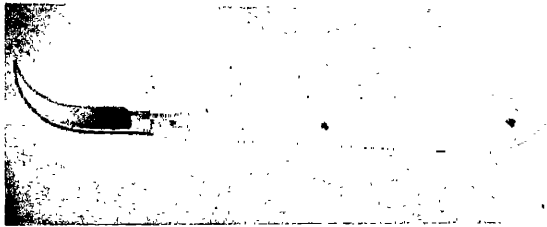
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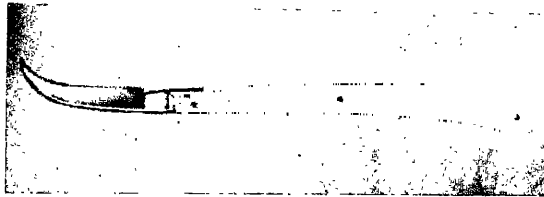
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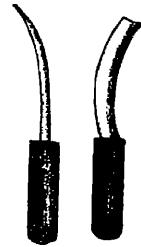
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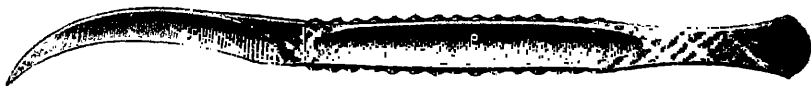
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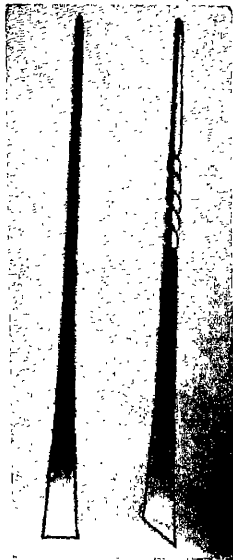
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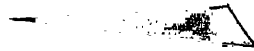
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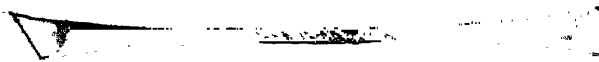
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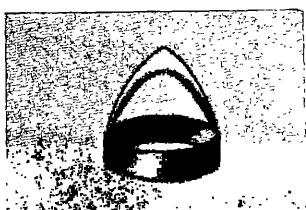
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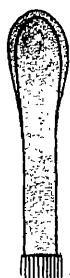
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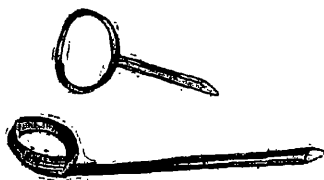
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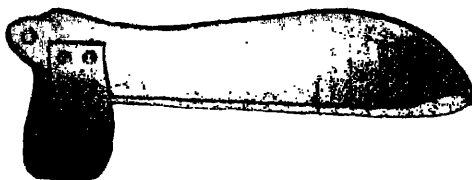
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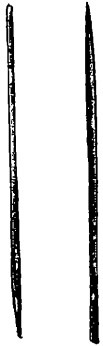
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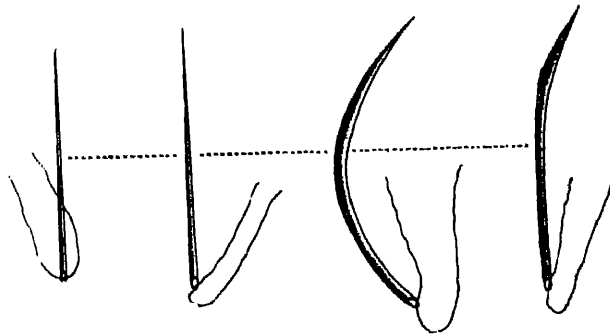
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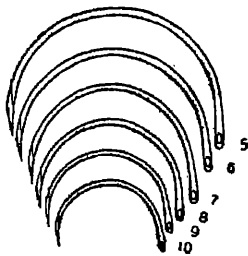
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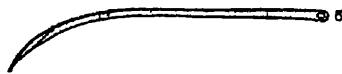
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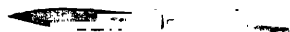
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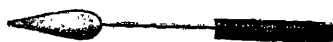
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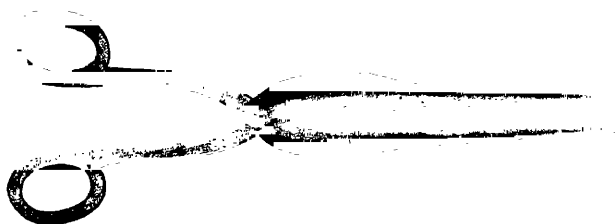
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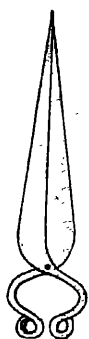
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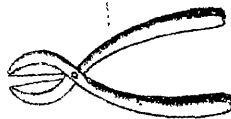
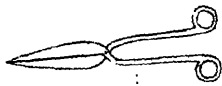
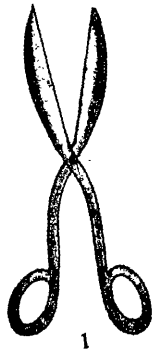
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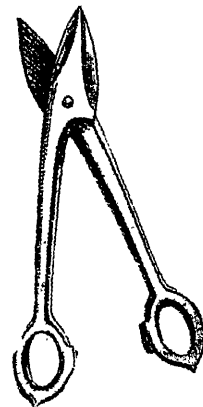
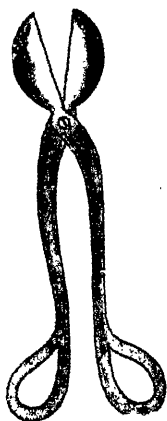
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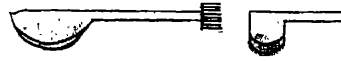
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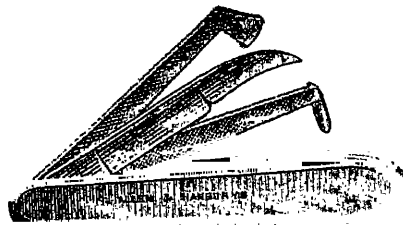
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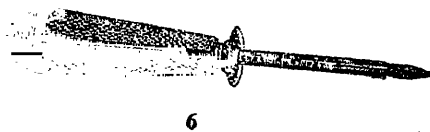
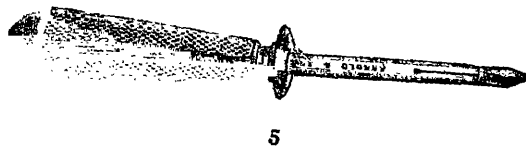
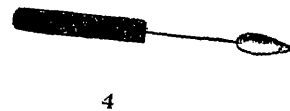
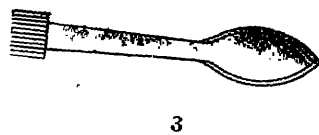
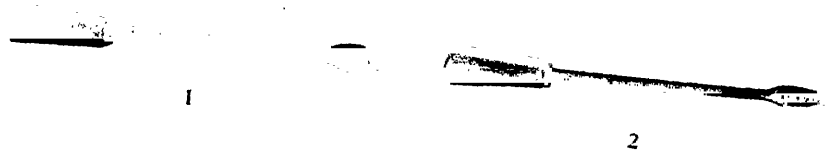
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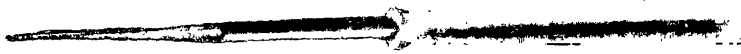
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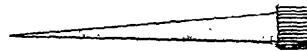
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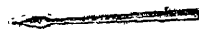
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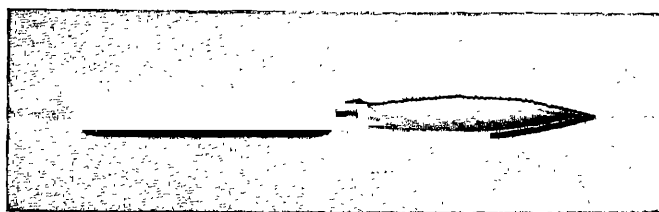
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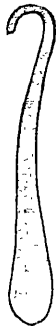
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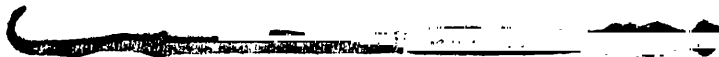
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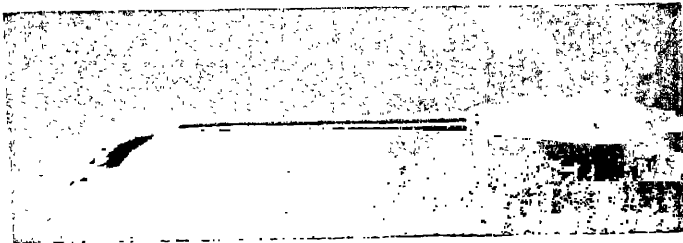
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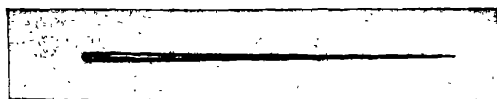
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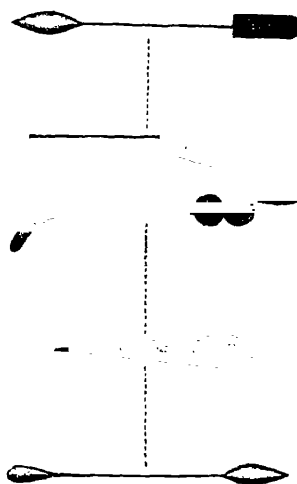
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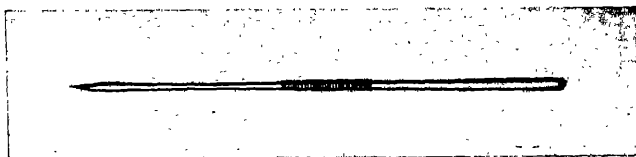
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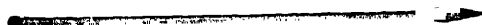
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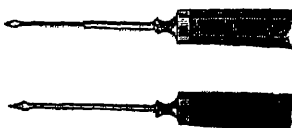
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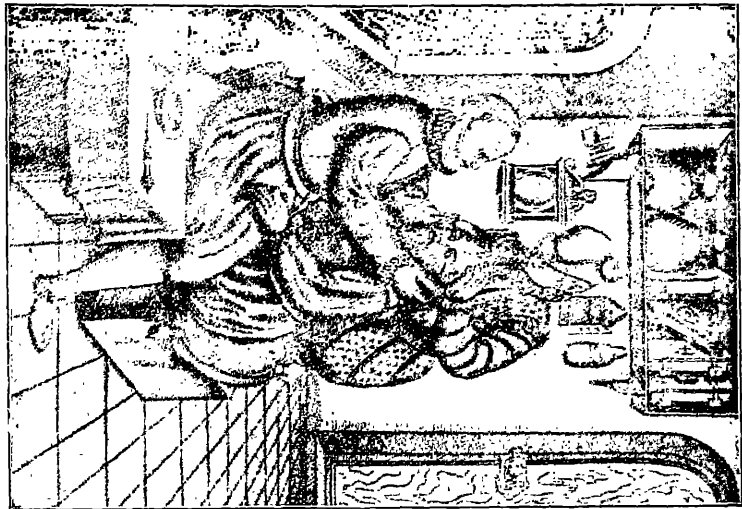
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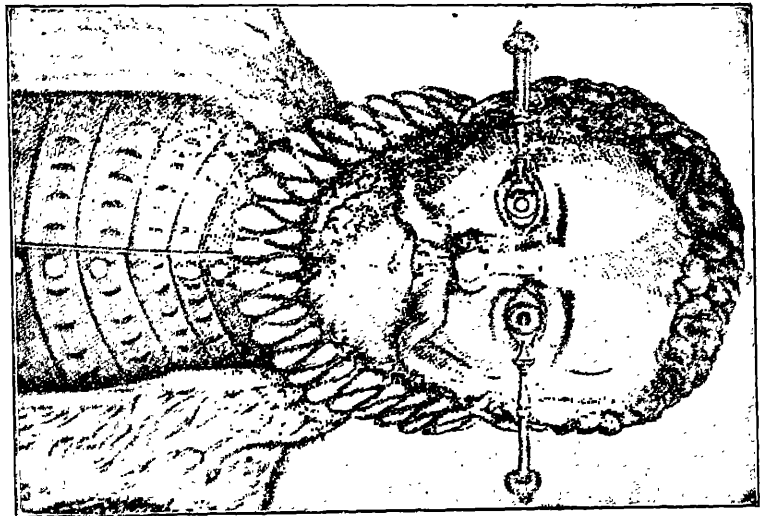
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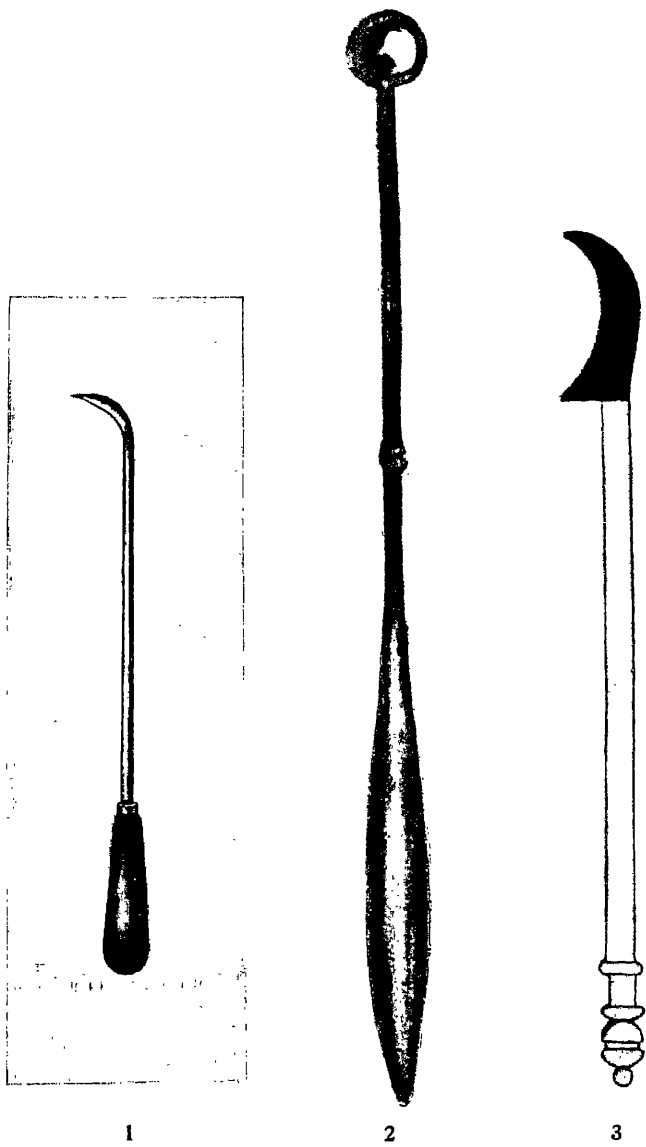


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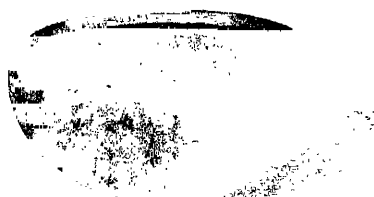
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The Surgical Instruments of the Hindus.

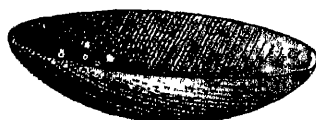
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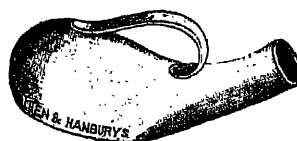
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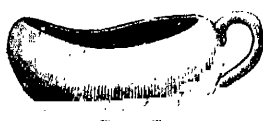
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THE SURGICAL INSTRUMENTS OF THE HINDUS.

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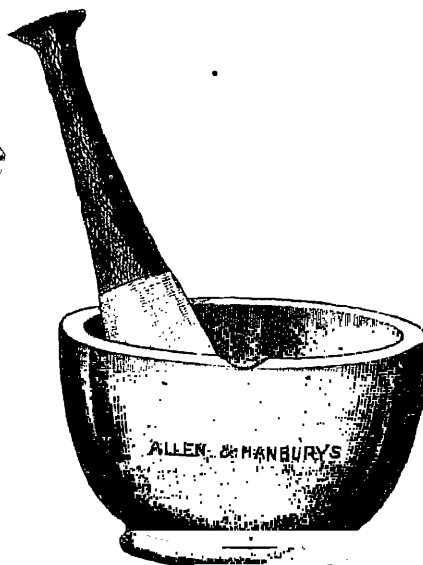
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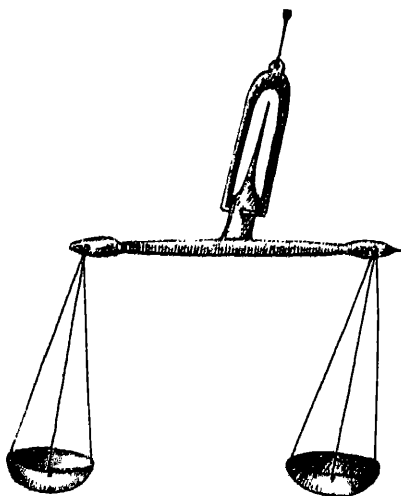
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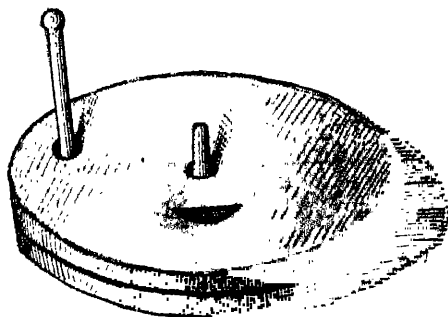
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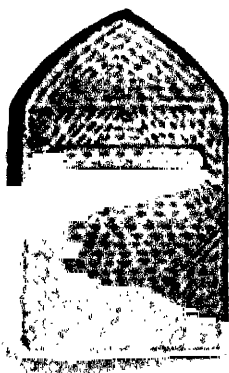
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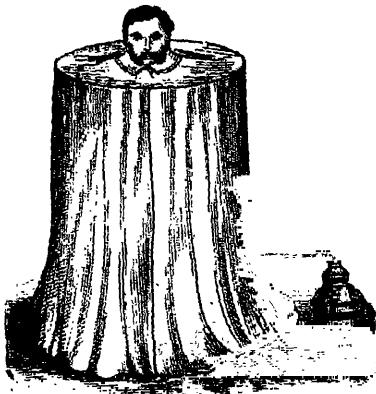
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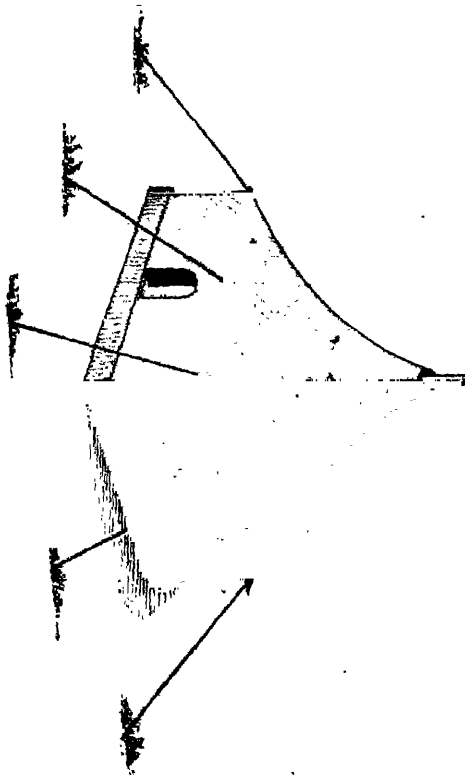
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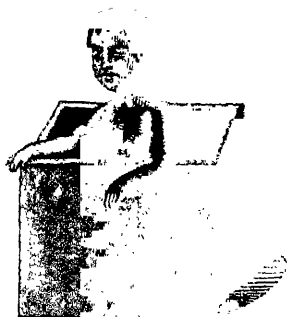
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